

**Ernesto 'Che' Guevara:
socialist political economy
and economic management
in Cuba, 1959-1965**

Helen Yaffe

London School of Economics and Political Science

Doctor of Philosophy

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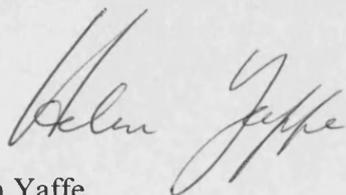
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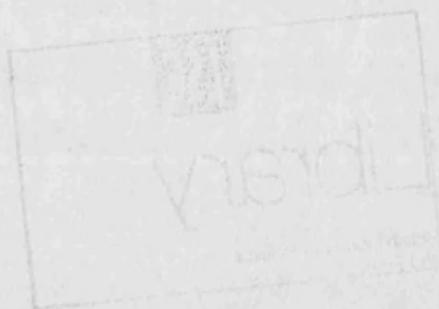
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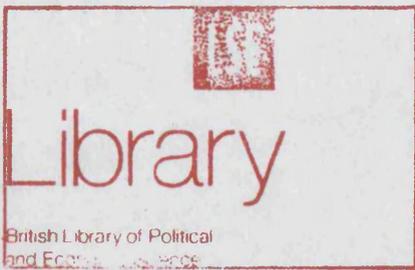
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Abstract

The problem facing the Cuban Revolution after 1959 was how to increase productive capacity and labour productivity, in conditions of underdevelopment and in transition to socialism, without relying on capitalist mechanisms that would undermine the formation of new consciousness and social relations integral to communism. Locating Guevara's economic analysis at the heart of the research, the thesis examines policies and development strategies formulated to meet this challenge, thereby refuting the mainstream view that his emphasis on consciousness was idealist. Rather, it was intrinsic and instrumental to the economic philosophy and strategy for social change advocated.

Analysing the evolution, impact and institutionalisation of his ideas, this thesis fills several gaps in the history of economic thought, Cuban economic history and the literature on Guevara. Highlighting his study of Marx's *Capital*, recourse to the technological and managerial advances of capitalist corporations and critique of Soviet political economy, the research offers a stimulating new contribution to the field of socialist theory. It examines the organisational structures and control mechanisms Guevara created, demonstrating how they link to his Marxist formation. It provides the first record of Guevara's role in several critical areas: promoting education and training; establishing accounting, investment and supervision systems; forging workers' participation in management; founding research and development institutions; formulating policies to raise consciousness and integrating psychology as an economic management tool.

The research is based on new archival and interview sources. The thesis concludes that Ernesto 'Che' Guevara made an indispensable contribution to socialist political economy and played a vital role in industrial organisation and economic development in Cuba. It connects these two contributions, demonstrating how Guevara's analysis of the law of value was integral to the economic management system he created as Minister of Industries.

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Acknowledgements

Between autumn 1995 and summer 1996 I lived in Cuba with my sister – austere years during the Special Period. Cubans dug deep to find what they needed to survive, as individuals and as a socialist society. During a solidarity brigade to an agricultural camp in Ciego de Ávila we met hundreds of young Cubans who had volunteered to work in the fields. One teenager of my own age told me they were there ‘to defend our country, to defend socialism.’ Having grown up in central London, this was an unfamiliar attitude which served as an important insight into moral incentives and socialist consciousness. Since then this lesson has been reinforced on frequent trips to Cuba, by the commitment and sacrifice demonstrated by members of the Union of Young Communists who led brigades and organised international festivals.

This thesis owes its content to the many protagonists who collaborated with Guevara in Cuba 1959-1965 and who patiently responded to my questions. Without them it would not have been possible, certainly not in its current form. This history is almost as much their own as Guevara’s. Orlando Borrego Díaz showed endless patience and encouragement, as the list of interviews in the bibliography demonstrates. My determination to read his book led me to Guatemala to improve my Spanish. It was worth it. Ángel Arcos Bergnes offered me support and material from his own archive, and responded to my endless enquiries with the enthusiasm for which Guevara had praised him. Other important interviewees who allowed me to return for a second interrogation include Edison Velázquez, Enrique Oltuski and Tirso Sáenz. These revolutionaries share an exciting history as part of Guevara’s inner circle and it is their commitment to Guevara’s theory and practice, and their wish to disseminate knowledge about it, which motivated their support.

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CHAPTER 1

Introduction

Popular biographies, memoirs, academic articles and political tracts have focussed on Ernesto 'Che' Guevara's military commitment to revolutionary social change; the influence of his travels in Latin America, his participation in guerrilla warfare in Cuba 1956-1959, the Congo 1965 and Bolivia 1966-67. Four decades after his death, Guevara is still both admired and derided, testimony to the fascination his persona continues to hold. Yet his most significant contribution remains largely unknown. His economic ideas and work in the Cuban government 1959-1965 have received scant attention from historians, social scientists and other commentators.

Analysing the evolution of Guevara's economic analysis, its impact and institutionalisation through the Department of Industrialisation, the National Bank and the Ministry of Industries, this thesis fills several gaps in the history of economic ideas, Cuban economic history and the literature on Guevara. It demonstrates that Guevara made an indispensable contribution to socialist political economy and played a vital role in industrial organisation and economic development in Cuba. It connects these two contributions, demonstrating how Guevara's Marxist analysis of the law of value was integral to the economic management system he created, known as the Budgetary Finance System (BFS).

The problem facing the Cuban Revolution after 1959 was how to increase productive capacity and labour productivity, in conditions of underdevelopment and transition to socialism, without relying on capitalist mechanisms that would undermine the formation of new consciousness and social relations integral to communism. Locating Guevara's economic analysis at the heart of the research, the thesis examines policies and development strategies formulated to meet this challenge, thereby refuting the mainstream view that his emphasis on consciousness was idealist. Consciousness was intrinsic and instrumental to the economic philosophy and strategy for social change.

The projects and institutions guided by Guevara cannot be understood without reference to his economic ideas. The BFS began as a practical measure to solve concrete problems, principally those created by the sudden nationalisation of industry and the exodus of qualified personnel. However, the BFS was broadened and given a theoretical base as Guevara immersed himself in Marx's analysis of the capitalist laws of motion, thus strengthening his conceptions about the transition to socialism. Highlighting his study of Marx's *Capital*, recourse to the technological and managerial advances of capitalist corporations and critique of Soviet political economy, the research offers a stimulating new contribution to the field of socialist theory. Marx had illustrated that the law of value is central to the capitalist mode of production which led Guevara to challenge the Soviet insistence on using and developing that economic mechanism in the construction of socialism. His conception was integral to the apparatus developed under the BFS and his vision of *Cuba socialista* as one big factory. The thesis illustrates Guevara's claim that in the long term an emphasis on consciousness would lead to greater economic efficiency and productivity than the use of material incentives, capitalist categories and levers.

The thesis also examines the organisational structures and control mechanisms Guevara created, demonstrating how they link to his Marxist formation. It provides the first record of Guevara's role in several critical areas: promoting education and training; establishing accounting, investment and supervision systems; forging workers' participation in management; founding research and development institutes to apply science and technology to production; and formulating policies to raise consciousness and commitment to the Revolution, whilst institutionalising psychology as an economic management tool.

The thesis is based on new archival and interview sources: ministerial transcripts; manuals; annual reports; personnel assessments; management board reports; factory inspection reports; economic perspectives documents; technical, economic and theoretical journals; speeches; unpublished conference papers, articles and presentations. Most of this material has never been published commercially nor translated from Spanish. In addition 60 interviews were carried out with nearly 50 of Guevara's closest collaborators and another 12 oral sources gathered from

presentations and seminars. Finally, a significant quantity of contemporaneous Cuban newspapers and magazines was collected.

RESEARCH PROCEDURE

Given the lack of material about Guevara's work as Minister of Industries, the first task was to track down those linked to him via industry or engaged in the theoretical debate about socialist transition, 1963-1965. Bertram Silverman compiled 17 articles from ten authors who participated in what is known as the Great Debate.¹ The ten include Guevara (deceased), the French Marxist Charles Bettelheim (deceased), and the Belgian Marxist Ernst Mandel (deceased). There was no information about the status of the other participants, whether alive and/or in Cuba. In 2001, Orlando Borrego, his closest collaborator in the sphere of industrial organisation, published a long-awaited account of Guevara's work in Cuba.² In February of the same year, a conference was held in Havana to mark the 40th anniversary of the establishment of the Ministry of Industries (MININD). All but one of the panellists had been a member of MININD's Management Council. Their presentations were published in a limited edition pamphlet.³ From the content it was clear what the speakers' areas of specialisation had been. As well as providing the names of key players, these two publications provided the first outline of practical policies within MININD, particularly concerning technology and metallurgy development projects.

In August 2004, the British government declassified two documents written by the British embassy in Havana: the 1967 and 1968 reports on *Top Personalities in Cuba*. This coincided with the mainstream cinema release of *The Motorcycle Diaries* about Guevara's travels in Latin America in 1952. In 1967 the British embassy had described Guevara as the: 'bearded Argentinian, with his Irish charm and his inevitable military fatigue uniform, [who] has exercised considerable fascination

¹ Bertram Silverman, *Man and Socialism in Cuba: The Great Debate*. New York: Athenaeum, 1971.

² Orlando Borrego Díaz, *El Camino del Fuego*, La Habana: Imagen Contemporanea, 2001.

³ Enrique Oltuski, Ángel Arcos Bergnes, Ángel Gómez Trueba, Tirso Saézn. The last exponent was Maria del Carmen Ariet García, scientific coordinator of the *Centro de Estudios Che Guevara* in Havana. Published as *40 Aniversario Ministerio de Industrias*, La Habana: Editora Política, 2001.

over many men and women.’⁴ The documents list 65 and 58 names respectively, summarising their involvement in the revolutionary process and contemporaneous position in government. This indicated who had relevant interaction with Guevara, for example, as colleagues on the Economic Commission of the Central Committee of the Communist Party, as a relevant co-minister of Labour, Social Security, Education, Domestic or Foreign Trade; or who accompanied Guevara on international trade missions and attended overseas events with him. These names were added to the ‘interview wish-list’. Again, there was no further information as to their current status.

A semi-structured interview technique was adopted for the research. Two standard questionnaires were devised; one for Guevara’s colleagues in MININD, the other for his co-ministers and participants in the Great Debate.⁵ The first questions were identical, designed to obtain information about the interviewee and enable an assessment of their understanding and positions taken at that time: their class background, educational status, employment history and political affiliations before the Revolution of 1959. Questions for Guevara’s colleagues aimed to establish their degree of interaction with him, their understanding of theoretical issues raised in the Great Debate and how they were informed about the conceptual and organisational structures of the BFS. Questions for those with a higher political or theoretical level at that time aimed to establish the severity of ideological differences within the new regime, how early these arose, what position they had personally taken, with which tendency that placed them and the extent of Guevara’s influence on theoretical and organisational structures in Cuba.

Other standard questions required interviewees to reflect back on the Great Debate and react to the view that Guevara had left Cuba because of the relative failure of his economic policies. All interviewees were asked to specify Guevara’s most important contribution to the Revolution. Research into the biography of each interviewee generated specific additional questions based on their individual expertise and experience. This yielded detailed responses, focussed on issues relevant to the thesis,

⁴ National Archives, FCO 7/529 211465, *Top personalities in Cuba*, (1013/21/67), Despatch No. 36, British Embassy, Havana, 20 September, 1967.

⁵ See Appendix 2.

and helped to avoid hagiographic or nostalgic accounts.⁶ Any documents or other contacts mentioned during these meetings were pursued. Many names were deleted from the interview wish-list once it was known that they had died, including several during the research field trips.⁷ In total over 70 oral recordings of interviews, seminars and presentations, from nearly 50 of Guevara's closest collaborators were collected. Specialists who had carried out work relevant to the topic were also contacted and consulted, including economic historians,⁸ psychologists,⁹ political scientists¹⁰ and economists.¹¹

Unpublished documents and original interviews

The thesis bibliography demonstrates the variety of primary and archive material on which this thesis is based. Most significant are:

- From the Ministry of Sugar [MINAZ] in 1967 Borrego published a seven-volume compilation of Guevara's works. Just 200 copies were printed and distributed selectively. Much of this material has been published in Cuba and some even translated and published abroad. The contents of volume six concerns MININD. It was never published and is relatively unknown. It includes: 'bimonthly 1962 meeting' transcripts, 13 meetings of MININD management between January and December 1964; MININD Management Council reports, factory visit reports and annual reports.
- MININD's *Manual for Factory Administrators*, demonstrating administrative norms and procedures for cost control, accounting and supervision. It expounds political economy concepts and offers guidance to administrators on management techniques.

⁶ Transcripts of the interviews will be made available pending submission of the thesis and possible publication of the material, with the agreement of the interviewees.

⁷ Most important among them Ángel Gómez Trueba, MININD's Vice Minister of Industrial Construction, Dr Gustavo Torroella, founder of the Psychology Group, Marcelo Fernández Font, President of the National Bank and opponent of Guevara's in the Great Debate and Demetrio Presilla head engineer at Nicaro nickel mine.

⁸ Ernesto Molina Molina.

⁹ José Lázaro and Juan Carlos Campo from the Centro de Psicología y Sociología.

¹⁰ Darío Machado, Jesús García, María del Carmen Ariet García, Carlos Tablada Pérez and Fernando Martínez Heredia.

¹¹ Alfredo González Gutiérrez, Fidel Vascos, Juan Triana Cordoví and Rafael Sorhegni.

- A guidebook on the ‘model socialist enterprise’, written by Guevara’s team of advisors under his instruction. Less than ten copies were printed. This was an unfinished project and did not constitute policy guidance.
- Reconstruction and Analysis of Cuban Economic Statistics 1959-1976, compiled in 1976 to facilitate Cuba’s entry into the Council for Mutual Economic Assistance and declassified in 1989.
- Contemporary magazines and journals consulted and/or collected, including: *Nuestra Industria*, *Cuba Socialista*, *Bohemia*, *Granma*, and *Juventud Rebelde*.

Strengths and weaknesses of resources

First hand accounts

Any study of an individual must avoid hagiography. Reliance on personnel accounts increases the danger, particularly if the subjects are admirers of the individual, as in this case they invariably are. This does not mean that interviewees have not criticised Guevara, the thesis narrative shows that they have. Guevara’s closest collaborators were profoundly affected by his methodological approach to problems, which emphasised honesty in assessment, self-criticism, and the constant struggle for self-improvement. Annual reports for production units in MININD had a section for criticisms of the minister, not just the ministry. This encouraged employees to think critically about their leader, as well as to accept criticism themselves. Those who were ministerial equals and/or opponents of Guevara in the Great Debate also criticised him, not least to validate their contemporaneous disputes. Interestingly, the one published opponent still alive in Cuba stood by disagreements with Guevara over the political economy of socialism, despite the collapse of the Soviet model which he defended.¹² Indeed, determined to undermine the commercialised and commodified image of the revolutionary idol, interviewees had a vested interest in portraying the ‘real’ Guevara. Hence they revealed a more complex and difficult man; demanding and unrelenting, sometimes cutting and never frivolous.

Interviewees from MININD were clearly moulded by their proximity to Guevara and adopted many of his values.¹³ Their replies about Guevara reflect their high esteem

¹² Joaquín Infante.

¹³ This is not to claim that all those around him did. Many will have left his orbit, at that time and during the following years.

for him. Nostalgia may have romanticised the experience of working with Guevara, whose posthumous glory has rubbed off on them. However, none of them attached traditionally nostalgic values to the experience, such as fun, happiness or being made to feel special. The questions devised were designed precisely to avoid the analysis being skewed by nostalgia and instead assess Guevara's success in communicating his ideas on socialist transition to colleagues with an inferior educational and political level. Standard questions revealed a remarkable degree of corroboration between the interviewees concerning projects, structures, events and interpretations. Emphasising Guevara's intellectual superiority, many interviewees admitted they had lacked a profound understanding of his theories. However, they appreciated the practical policies and adopted certain stylised points of theory. This response reveals the intellectual isolation in which Guevara operated.

Another issue raised by the use of interview material is in the style of responses given, which reflect the personality of the interviewees as much as insights. For example, Borrego adopted a more formal approach to his responses, without distinguishing between his own important contribution and official policies. Other interviewees spoke as protagonists, highlighting their personal roles. In addition, the rich detail provided by interviewees may have skewed the research in detailing the areas in which they were involved. Other aspects of the history of MININD may be underdeveloped because the thesis could only work with the material available. History is written by victors. In this case they are those who are alive in Cuba and were interviewed for the thesis.

This thesis focuses on the intellectual product of Guevara's involvement with the Cuban Revolution: the BFS and his challenge to Soviet orthodoxy. Therefore, romanticised rhetoric about Guevara as exemplary leader does not serve the research, whereas practical information concerning how study groups were organised, for example, or what instructions Guevara gave in setting up the Institute of Mineral Resources have been fully exploited. Ultimately the search for corroboration of interviews lies in the documentation from MININD.

Unpublished material

Volume six of Borrego's compilation, the MININD material, is raw and dense, hundreds of pages of meeting transcripts and reports without introduction, explanation or references. To exploit fully this material it is essential to have a comprehensive knowledge of the changing historical circumstances, month by month. Persons, institutions, projects and events are mentioned which necessitate constant cross checking and further enquiries. The material lacks the historical hindsight necessary to know whether the projects discussed were implemented. The *Manual for Factory Administrators* introduces similar problems. The MININD transcripts reveal the motivation for writing the manual, in discussions about administrative and conceptual deficiencies. However, there is nothing to indicate the impact of its introduction. Therefore, it was necessary to carry out further interviews, review memoirs and annual reports, using the materials in concert to determine how Guevara's theoretical analysis was institutionalised in MININD and with what results.¹⁴

Having originally intended to produce a comparative macroeconomic assessment of Guevara's BFS and the economic management systems operating in other ministries, it quickly became obvious that this would not be feasible given the existence of too many variables to allow comparison between different institutions and because the time scale was too short for useful assessment. Guevara implemented the BFS as minister of industries for just over four years, during which time Cuba was blockaded, invaded and embroiled in nuclear confrontation. The system itself was new, original and evolving. For these reasons the statistical economic analysis consulted is of limited independent value. The problem of the format, compatibility and reliability of macroeconomic statistics for Cuba is discussed in detail in the following historiography chapter.

Dividing the field research into two periods was extremely useful. It meant that material could be assessed after the first trip to uncover the gaps in knowledge before returning to the field to pursue relevant information. This process strengthened the technique of searching for corroboration between and within documentation and interviews.

¹⁴ See the example of specific interview questions in Appendix 2.

This thesis rides on a wave of interest in Guevara. Much of the new literature also challenges the stylised image of the revolutionary idol. However, none of it contains a serious analysis of his contribution to socialist political economy in dynamic interrelation with his practical work in charge of Cuban industry. Where Guevara's own material is published, it lacks the interpretation and historical contextualisation which this thesis brings to the field. It also lacks information about how his ideas were applied in practice in the development of the BFS.

Whilst this thesis provides an analysis of the dynamic between Guevara's theory and practice, there are nonetheless several important and related themes which are beyond its scope. The initial intention was to examine the application of Guevara's economic ideas in Cuba in two periods of crisis: the early 1960s, under Guevara's direction; and the period known as Rectification from the mid-1980s, when his approach was revisited as Cuba pulled away from the Soviet model. During the first research field trip, however, it became clear that the quality and abundance of materials uncovered relating to the first period would make it unfeasible to extend the analysis to the second period. An examination of how policies introduced during Rectification link to Guevara's theory of socialist transition remains an area of potential future research. Similarly there is the need for an investigation into the proximity or otherwise of Fidel Castro and Guevara's theories of socialism. Future research could also extend to examine how Guevara's analysis of the operation of the law of value in the period of socialist transition influenced his view of international relations; particularly within the socialist bloc countries and between the bloc and the underdeveloped countries.

In addition, although the thesis analyses Guevara's emphasis on socialist consciousness it does not discuss a Marxist theory of consciousness. Guevara's understanding of consciousness is clearly defined as social conscience and commitment to the aims and objectives of the Revolution. He was interested in how a change in the mind was manifested in changing socio-economic and political behaviour. This thesis is not concerned with issue of ideology, the formation of ideas or the study of reflexive processes as such. It illustrates how the tools of psychology were integrated as an economic management tool, but does not extend to the psychology of Guevara's approach. Consciousness and psychology are treated as aspects of his analysis of the law of value and of his BFS.

Since 2004, Orlando Borrego has been invited to Venezuela several times to lecture on the BFS. He addressed a special session of the National Assembly dedicated to Guevara's economic ideas on socialist transition. Venezuelan President Hugo Chávez Frías has declared the importance of Guevara's contribution to this field. This apparent vindication of Guevara's approach to socialist economic development, along with the publication of his works and the new wave of auto-biographies by his contemporaries, serves to increase the general interest in a re-examination of his contribution, both to the Cuban Revolution and to the political economy of socialism. This thesis will offer an original and specialised contribution to a field of study that is assuming new and significant status.

THESIS STRUCTURE

The structure of the thesis reflects the dynamic interaction between theory and practice which characterised Guevara's own work. Part One continues with a review of existing literature. Chapter 2 highlights the polemical nature of Cuba studies and Chapter 3 focuses on the literature on Guevara. Both sketch out the lines of debate and illustrate the originality of this work and its contribution.

Part Two of the thesis explains how the BFS evolved, exploring the practical experiences which contributed to its formulation, as well as the theoretical conceptions. Chapter 4 presents a thematic summary of Guevara's responsibilities with the Revolution from 1 January 1959 until the foundation of the MININD in February 1961, exploring the impact and consequences of his experiences: overseas trade missions, the agrarian reform laws, nationalisations of industry, his work as President of the National Bank and as head of the Department of Industrialisation. It underlines his key role in the military and political consolidation of the Revolution and economic transformation. Chapter 5 examines Guevara's written contribution to the Great Debate on socialist transition which took place in Cuba 1963-1965. It establishes the conceptual framework necessary to appreciate his practical policy formulations. It demonstrates that Guevara embraced debate as a tool in the process of searching for dynamic solutions to practical problems, avoiding formulaic prescriptions. This part serves as a bridge to the following substantive part on the economic history of MININD.

Part Three, the core of the thesis, examines Guevara's solutions to the problem cited at the beginning of this introduction: transition to socialism in conditions of underdevelopment with limited recourse to capitalist mechanisms. It examines the practical policies, projects and structures which he developed in MININD, 1961-1965. Although all these policies were concurrent, the part is divided into an introduction and five chapters in order to focus the investigation and organise the narrative. The chapters are: 6) education, training and salaries; 7) administrative control, supervision and investment; 8) collectivising production and workers' participation; 9) science and technology; and 10) consciousness and psychology. Each section will illustrate the practical problems which those specific policies were designed to overcome, the obstacles encountered in their application and demonstrate how they linked to Guevara's analysis of the operation of the law of value and his conceptions about socialist transition.

Part Four provides conclusions and assessments, both Guevara's and those of the thesis. Chapter 11 returns to Guevara's theory, examining his critique of the Soviet *Manual of Political Economy*, written after his departure from Cuba in 1965. Following six years of work in the service of the Cuban government, this critique provides evidence of how his theoretical ideas had developed through the practical experience of implementing the BFS and since his earlier theoretical articles as part of the Great Debate. Chapter 12 presents the assessment and conclusion of the thesis, summarising Guevara's contribution to both socialist political economy and economic management in Cuba 1959-1965. It thematically summarises the structures and policies which Guevara introduced as part of this BFS.

Note on footnotes:

Full information on interviews is cited the first time of mention in each chapter. Subsequent citations are recorded as 'Interview' without the date. Where two or more interviews have taken place with the same person in different years, the year is stated. Where two or more interviews have taken place in the same year, the full date is used.

PART ONE

Historiography and literature

CHAPTER 2

Cuba: historiography – the politics of Cuban Studies

Since 1959 writing on Cuba has been shaped by the Revolution. Revolutions present a challenge, not just to the institutions which they rise up to tear down, but also to theoretical and philosophical interpretations of the world, human society and development. Academics and commentators are probed by the bloody hand of revolution as they sit at their desks, pens poised to interpret, analyse, narrate and predict. In this sense, as English historian EH Carr explained, there can be no objectivity in history: ‘history is movement; and movement implies comparison.’¹ Movement is understood as the dialectical relationship between human activity and objective context; cause and effect; conflict and resolution. Carr cited Meinecke’s assertion that: ‘The search for causalities in history is impossible without references to values.’² The search for causalities involves a subjective interpretation of those conflicts. Scholars interpret events through spectacles tainted by their own interests and principles, usually rooted in their own material realities. The impact of political and ideological differences is such that even methodological procedure is disputed. Against Carr’s assertion of a need for a relativistic and sociological approach to history, GR Elton argued that historical work should focus on documentary record and fact with a backbone narrative of political events.³ The extent to which ‘facts’ speak for themselves, the context in which the facts take place, or why some facts may be more significant than others also reflect the motives of the historian who has presented them. As Cuban-American historian Nelson Valdés stated: ‘Empiricism

¹ Edward Hallet Carr, *What is History?*, London: Penguin, 1970, 129.

² Meinecke, quoted by Carr, *History?*, 107.

³ See Richard J Evans, *In Defence of History*, London: Granta Publications, 1997, for a summary of these views.

does not free us from philosophical assumptions or from ideological preferences; it merely hides them from the reader and perhaps even from the writer.’⁴

The post-1959 literature on Cuba has been particularly subject to interpretative bias for several reasons: the historical proximity of the Revolution, the context of a broader ideological confrontation between capitalist and socialist world systems and because the geographical closeness of Cuba to the United States brings those conflicting ideologies together on a geographical battlefield. The stakes remain high. There are few overviews of the historiography of Cuba. Fewer still which include an explanatory statement of the values motivating the authors. This chapter of the thesis sets out to unravel and expose the political tendencies prevailing in post-1959 Cuban studies. Therefore, rather than providing a general historiography of Cuban history writing, it focuses on the dichotomy between the Cubanology and Cubanist schools by examining their political motives and institutional frameworks.

In his critical assessment of Cuban studies Valdés complained that:

‘Scholars dealing with the Revolution, or those reviewing their work, have shared a strong aversion to considering or even discussing the premises, concepts, logic, framework, or theoretical perspectives their works had. This is not surprising. The literature on Cuba has been permeated by so much political polemic that scholars have preferred to remain silent about the method they have utilized or the paradigm guiding their investigation and analytical logic... Thus, theoretical paradigm and political positions have been defined as identical.’⁵

Valdés described a paradigm as a single generally accepted view about a phenomena and the correct procedure for researching it. Once a paradigm is accepted, he added, it is assumed to be scientific and objective. Those who do not accept the paradigm

⁴ Nelson P Valdés, ‘Revolution and Paradigms: A Critical Assessment of Cuban Studies’, in Andrew Zimbalist (ed) *Cuban Political Economy: Controversies in Cubanology*, London: Westview Press, 1988, 185.

⁵ Valdés, *Paradigms*, 184-185.

are marginalised from the community of scholars, their 'dissident' work seen as naïve or even ideological, by the mainstream scholars.⁶ This is arguably the case in Cuba studies where the English language paradigm has been set the Cubanologist school. Valdés explains how subtle forms of political censorship can be applied to 'dissident' views, compounding the obstacles to clear-headed and politically unbiased study of the Revolution. Such censorship can be imposed by withdrawal of state sanction; ensuring that dissenting opinion cannot get published and divulged and that 'dissident' scholars cannot find academic employment. In Cuba studies there has been little mention or recognition of these issues.⁷ Operational problems for foreign researchers, such as access to Cuban archives and society, have further reduced the possibility of interpretations based on hard evidence to challenge the predominate paradigm.⁸

The main controversies in interpreting the Cuban Revolution can be summarised as follows: 1) historical discontinuity *versus* historical continuity of the Revolution of 1959; 2) the Revolution betrayed by the move towards socialism *versus* socialism as the fulfilment of Cuba's struggle for independence, with particular reference to national hero José Martí; 3) the economic prosperity of pre-revolutionary Cuba and progressive role of the US *versus* the economic stagnation and neo-colonial dependency prior to 1959; 4) the weakness of Cuban economic growth since the 1959 *versus* development and equity resulting from the Revolution; 5) the personal domination of Fidel Castro and the absence of civil society in Cuba *versus* the mass participatory character of society and the regime; 6) Cuba's subordination to, and economic dependency on, the Soviet Union *versus* the autonomy of Cuba's domestic and foreign policy.

⁶ Valdés, *Paradigms*, 188.

⁷ This is reflected by the range of sources cited in this chapter of the thesis.

⁸ Valdés, *Paradigms*, 188.

CUBAN HISTORIANS

Partisan scholarship has a long tradition in Cuba. Robert Freeman Smith states that: 'Cuban historical scholarship matured during the century of conflict concerning the status of Cuba, and the works of Cuban historians reflected the various aspects of the conflict... Reform, autonomy, independence, annexation to the United States, and the status quo of Spanish rule were advocated by various men as being the true direction of Cuban historical development.'⁹ The threat of fundamental structural transformation existed throughout the *cien años de lucha* [one hundred years of struggle] for independence before 1959. Scholars and other intellectuals played a vital role in defining the theoretical and moral grounds of social and political debates.

At the beginning of the 20th century, Cuba's 'liberal' historians set the dominant paradigm, celebrating 'independence' from Spanish and admiration of the United States, which was seen as a liberating and modernising force.¹⁰ However, as US imperialist interests increasingly asserted themselves, via military interventions, political machinations and economic penetration, a more critical current of Cuban scholars and revolutionary intellectuals emerged.

Revisionism became a powerful intellectual force in the 1920s. With recourse to the anti-racism and anti-imperialism of José Martí, historians reinterpreting the Cuban struggle for independence and relations with the US reflected the general political turmoil and unrest of society at large. They forged the concept of *cubanidad*, a sense of national identification transcending differences in heritage, race, religion or class. Louis A Pérez explained the significance of this new trend: 'In repudiating the organic foundations of the state, specifically the constitution of 1901 and the appended Platt Amendment, revisionist writers withheld from the republic the

⁹ Robert Freeman Smith, 'Twentieth Century Cuban Historiography', *The Hispanic American Historical Review*, Vol. 44: 1 (1964), 45.

¹⁰ Smith, *Historiography*, 46.

historiographical corroboration necessary to underwrite its claim to legitimacy.’¹¹ They attacked the heroes of liberal historiography, those Cuban leaders who had signed the Platt Amendment, portraying them as national traitors. Citing the work of a Cuban Marxist Julio Cesar Gandarilla, *Contra el Yanqui* in 1913, as the earliest published attack on the US, Smith claims that revisionism provided the theoretical vehicle via which a: ‘few historians became converts to communism’¹²

The Revolution of 1959 ruptured Cuban social, economic and political institutions as it radicalised and consolidated to the left, being declared socialist in 1961. Cuban society as a whole became increasingly polarised. Many historians joined the exodus following the Revolution, settling in the US. For others the adoption of socialism was the vindication of their interpretation of history; the culmination of *cien años de lucha*. Revisionist historians evolved into revolutionary historians, emphasising continuity in the struggle against imperialism and for social and economic justice to legitimise, authenticate and indigenise the historicity of the adoption of socialism and the Revolution’s leaders.¹³ The assertion of continuity was not concocted after the Revolution in 1959, but had featured throughout the 1950s struggle against Batista. Political groups competed to claim their legacy in the struggle for independence. They nominated themselves as *Martianos*, faithful to José Martí’s vision of an independent, socially just and economically independent republic.¹⁴

Since 1959, the regime’s emphasis on full social inclusion and participation has encouraged studies on minorities and oppressed groups in Cuban history; women, black people, workers and communists. Pérez asserts that: ‘Throughout the 1960s and 1970s, new methodological approaches, including oral history, ethnology, and folklore studies, developed and enjoyed extensive application. Greater emphasis

¹¹ Louis A Pérez Jr, ‘In the Service of the Revolution: Two Decades of Cuban Historiography 1959-1979’, *Hispanic American Historical Review*. Vol. 60: 1 (1980), 81.

¹² Smith, *Historiography*, 48, fn 19.

¹³ Pérez, *Service*, 82.

¹⁴ Pérez, cites Marx who observed back in *The Eighteenth Brumaire of Louis Bonaparte* in 1852 that ‘just when [men] seem engaged in revolutionizing themselves and things in creating something that has never yet existed, precisely in such periods of revolutionary crisis they anxiously conjure up the spirits of the past to their service and borrow from them names, battle cries, and costumes in order to present the new scene of world history in this time-honoured disguise and this borrowed language.’ Pérez, *Service*, 80.

devolved upon the history of the inarticulate.’¹⁵ However, not all those previously consigned to the dustbin of history have been rescued by revolutionary historians. For example, little has been recorded about the contribution of anarchists and anarcho-syndicalists who played a decisive role in the radical workers movement in the first two decades of the 20th century, before the formation of the Cuban Communist Party in 1925. While the post-1959 regime can be depicted as representing the interests of these other minority and oppressed groups [*los humildes*] it is arguably the negation of the anarchists struggle for a stateless society.¹⁶

As a mechanism to defend the paradigms established outside the island, Cuban academics are often viewed from abroad as the personification of the state; a non-person. Cuban historian Rafael Hernández complains that: ‘According to this view, Cuban intellectuals lack their own perspectives and capacity for reflective thought. Either they are fainthearted or they are mere bureaucrats repeating official discourse.’¹⁷ He does not deny that intellectuals have been obstructed by bureaucracy, censorship or dogmatism in Cuba, but argues that applying a degree of ‘self-censorship’ is no less a contrived approach than joining the exile community in the US in order to gain access to bourgeois academic circles, the international marketplace and benefiting from finances and status as an exile. Success there also depends on accepting and perpetuating the dominant paradigm. As an example of this view, Pérez states that since the Revolution, Cuban historiography: ‘has tended to reflect faithfully the internal development and the prevailing needs of the state.’¹⁸ Such a statement is loaded with assumptions, for example, about what constitutes the Cuban state. Peter Johnson, while acknowledging that: ‘Cuban publishing is far more diverse than conventional wisdom would have it’, also concludes that the publishing industry has an ‘undivided commitment to serving state objectives.’¹⁹ For commentators outside Cuba, explained Hernández:

¹⁵ Pérez, *Service*, 87.

¹⁶ Actually many anarcho-syndicalists joined the Cuban Communist Party after its foundation in 1925.

¹⁷ Rafael Hernández, ‘Looking at Cuba: Notes towards a discussion’, *Boundary 2*, (2002), 125-6.

¹⁸ Pérez, *Service*, 89.

¹⁹ Peter T Johnson, ‘Cuban Academic Publishing and Self-Perceptions’ in *Cuban Studies 18*, Centre for Latin American Studies, Pittsburg: University of Pittsburg Press, 1988.

‘Cuban society is dormant, which is to say that it hardly exists. They make it appear as if Cuban reality were made up of “the government”, “the Party”, and “the elite” on one side, and a passive multitude on the other... The tendency to underestimate Cubans’ level of political culture is reflected in the vision predominant outside... In other countries, reference to civil society tends to mean the middle class, the intellectuals, the entrepreneurial elite, certain influential social movements and organizations, et cetera. Some of those conceptions are applied to evaluating the current situation in Cuba.’²⁰

This analytical and interpretive dilemma stems from the formulation of paradigms based on set assumptions. When scholars who accept the political-economic model of bourgeois democracy assess Cuba they tend to search for what they recognise. They will find most elements of this model missing, because Cuban society is developing according to different precepts, and conclude that Cuba is deficient or in some ways wrong. To understand and evaluate Cuba since 1959, scholars should extricate themselves from the constraints of opposing social constructs. Hernández describes as Eurocentric: ‘this vision of intellectuals’ exclusive role as culture’s “critical conscience” in a confrontation with power, equidistant from all political positions, a vestal virgin of some sterilized objectivity – as opposed to the intellectuals (as in our Latin American case) who act in history with their criticism and their polemics, contributing to concrete social change and taking sides in favor of social justice and independence.’²¹ Intellectuals, particularly historians have always contributed to real social and political movements in Cuba. This tradition continues today despite pressure from the ‘state’ for ideological cohesion and serious considerations of national security.²²

²⁰ Hernández, *Looking*, 128-129.

²¹ Hernández, *Looking*, 130-1, fn 4.

²² British Cubanist Antoni Kapcia has argued that dissent and debate have been permitted and at times encouraged in Cuba since 1959, except when it is politically or financially linked to US agencies and becomes an issue of national security. Talk by Kapcia. Institute of Latin American Studies, London. November 2002.

HISTORIANS OUTSIDE CUBA

Prior to 1959, US historians were far more interested in Cuba-US political-economic relations than in Cuban society and development, focussing on the causes for American involvement and intervention. Smith states that: 'This "historiographical imperialism" of American historians produced the term Spanish-American war, and helped to inculcate in many Americans a paternalistic view of Cuba.'²³ Indeed, not until 1964 did the first US historian acknowledge that two decades earlier Cubans had renamed it the *Guerra Hispano-Cubanamericana* [Cuban-Spanish-American War].²⁴

The Revolution of 1959 destroyed Cuban institutions modelled on and integrally linked to US institutions, jolting US scholars into a critical examination of the impetus for change and its future trajectory. Understanding Cuba became vital in the context of the Cold War, with socialism arriving on the doorstep of the US. Scholars began a probing examination of Cuban society.

DISSIDENTS

In 1964, Smith wrote that the quantity and quality of Cuban history produced had declined since the Revolution and that no 'exile school' had emerged.²⁵ By 1978, however, Anthony Maingot described the post-1959 US literature as 'massive'.²⁶ 'Dissident' intellectuals who settled into long-term exile carved out a special status and niche in anti-communist US institutions. In the academic arena, to qualify as a 'dissident' a Cuban had to have abandoned a position as an official or intellectual within the revolutionary regime, leaving the country without official sanction.

²³ Smith, *Historiography*, 67.

²⁴ The Cuban Society of Historical and International Studies voted to institutionalise this term in 1943. The title was approved by the Cuban Congress in 1946, demonstrating the predominance of the revisionist paradigm by then.

²⁵ Smith, *Historiography*, 51.

²⁶ Anthony P Maingot, 'A Question of Methodology: Review Essay on Recent Literature on Cuba', *Latin American Research Review*, Vol 13: 1 (1978), 227.

Dissidents came to enjoy a special status in the academic community, regardless of their previous ideological persuasion or positions: followers of the Soviet hard-line, experts in propaganda and advocates of censorship, Maoists, informers, intelligence agents, or professors who incorporated the dogmas of Socialist bloc manuals into their academic careers. All if they renounced political commitment to the regime and signed up to undermine the moral or economic viability of the Revolution, as Hernández pointed out: 'Overnight, they become independent intellectuals with the keys to credibility in their pockets'.²⁷

The moral and intellectual infallibility awarded to dissidents is evident in Sergio Roca's work on the Cuban planning system. Roca based his analysis on anonymous interviews with Cuban exiles resident in the US, all of whom previously held managerial, technical and other professional positions with the Revolution. Roca admits that: 'the subjects may have concentrated their comments on the short comings of Cuba's economic organisation', but justifies his reliance on these interviewees simply by denying that: 'they uniformly displayed a negative attitude toward the socialist system.'²⁸

Collating and publishing dissident opinion can serve some valuable function in its own right. However, claiming to 'objectively' assess an operational economic system on the basis of subjective testimony, distorted by vested interests, implies numerous methodological weaknesses and undermines the value of conclusions reached. Granted anonymity, the interviewees are unaccountable for their comments. Economic History Andrew Zimbalist claims that such methodological leniency would hardly be tolerated in another field of social science.²⁹ However, the result of the political antagonism between the US and Cuba and the intellectual's role in legitimising the positions of each, is that scholars have passed off work with sloppy methodology, such as Roca's, with little criticism from within their own school.

²⁷ Hernández, *Looking*, 125.

²⁸ Sergio Roca, 'State enterprises in Cuba under the New System of Planning and Management', in Mesa-Lago (ed) *Cuba Studies 16*, Pittsburg: University of Pittsburg Press, 1986, 156..

²⁹ Andrew Zimbalist, 'Interpreting Cuban Planning: Between a Rock and a Hard Place' in Zimbalist (ed), *Controversies*, 74.

CUBANOLOGISTS

Dissident intellectuals joined forces with mainstream bourgeois historians and social scientists to form a Cubanology school. The label has political connotations. Cuban historian José Luis Rodríguez described this group as playing: ‘a central role in the studies of Cuba in the context of the ideological and political battle mounted against the Revolution.’³⁰ This group defines the predominant paradigm for English language texts on Cuban history and contemporary society. Key tenets of this school are: the Revolution of 1959 presents a rupture in Cuban history, partly explained by mistakes made by the US administration; Fidel Castro is synonymous with the Revolution personally dominating developments on the island; civil society in Cuba is repressed, there is no democracy; Cuba’s economic growth since 1959 has been negligible; and pre-1959 dependency on the US was substituted by dependency on the USSR. To understand both the content and purpose of the Cubanology paradigm, it is necessary to assess these scholars own historicity through an examination of how their school developed from its base in the US.

Between 1959 and 1961 no institutional or academic studies of Cuba were undertaken in the US. The works which were published were mainly journalistic or narrative commentaries and polemics from radicals within the New Left, peripheral to the mainstream.³¹ The US government was confident that the new regime would soon be overthrown. However, after the Bay of Pigs debacle in April 1961 it was apparent that the Revolution had obtained a degree of permanency. It was a more complex enemy which demanded to be studied and understood in order to be defeated. That year the Pentagon commissioned the Rand Corporation to carry out two investigations: *US Business Interests in Cuba and the Rise of Castro* and *The Course of US Private Investments in Latin America since the Rise of Castro*. Meanwhile, similar studies were organised by the Special Operations Research Office of the American University and published as: *Case Studies in Insurgency and*

³⁰ Luis Jose Rodríguez, ‘The Antecedents and Theoretical Characteristics of Cubanology’ in Zimbalist (ed), *Controversies*, 27.

³¹ Work by Leo Huberman, Paul Sweezy, Paul Baran, Robin Blackburn, for example.

Revolutionary Warfare: Cuba 1953-1959. Rodríguez said: 'In effect, midway through the 1960s, a Center for Cuban Studies at the CIA was formed.'³²

In 1964 the Center for Latin American Studies at the University of Pittsburgh was founded under the National Defense Education Act, financed by the Ford Foundation and the US government, among other sponsors. The Centre played a dominant role in the study of Cuba outside the island. According to Rodríguez, its objectives were two fold: compile information to help plan future actions against the Revolution; and develop an analytical paradigm to depict the Revolution in a negative way for a global audience. All positive achievements were denied, official Cuban sources of information derided and misinformation disseminated about life in Cuba.³³ In April 1970, the US Library of Congress organised the International Conference on Cuban Acquisitions and Bibliography. It was decisive in consolidating the paradigm of Cuba studies and committed to extending the coverage and methodology of Cuba studies. The school was self-denominated 'Cubanologists' from this period and evolved more sophisticated and a supposedly 'impartial' approach to presenting the study of socialism in Cuba. Following the conference, the Center for Latin American Studies at the University of Pittsburgh became the co-ordinator and leading publicist of US academic studies of Cuba. The Center was directed by Cole Blasier, until Cuban exile Carmelo Mesa-Lago took over in 1974.

In 1969 the Institute of Cuban Studies (IEC) was established at the University of Miami for Cuban exiles scholars, claiming to promote: 'a dialogue among Cuban intellectuals of different points of view, on the analysis and the search for possible solutions to the fundamental problems of the Island and its Diaspora.'³⁴ Works were discussed within the group before publication, ensuring cohesion of the paradigm.

³² Rodríguez, *Cubanology*, 23.

³³ Rodríguez, *Cubanology*, 23-24.

³⁴ From IEC website: www.ieccubanos.org. The IEC's slogan is: 'Cuba unites us on foreign soil.' It included key Cubanologists such as Mesa-Lago, Jorge Domínguez, Roca, Pérez-López, Aguilar and Pérez Stable. In the late 1980s, the IEC allowed non-Cuban members. Today its website has links to counter-revolutionary organisations within Cuba.

During the Carter administration relations with Cuba thawed slightly. Reflecting this, in 1976 the *Informe Linowitz II* study recommended normalising relations with Cuba, concluding that: 'the North American policy of isolation with respect to Cuba did not promote the interests of the United States in any significant manner, and that these would be better served if the participation of Cuba in the constructive pattern of international relations were facilitated.'³⁵ Carter's approach was to undermine Cuban socialism through engagement with US capitalism. Cubanologist Jorge Domínguez participated in drafting this and subsequent reports.

The Reagan presidency in 1980 coincided with a juncture of revolutionary upheaval in Central America and the Caribbean, so that counterinsurgency theories resurfaced. Again Cubanologists became particularly influential in the formulation of US policy towards Cuba. The Reagan administration backed a new Institute for Cuban and Cuban-American Studies (ICCAS) at the University of Miami, directed by Cubanologist Jaime Suchlicki.³⁶ This 'conservative' Institute had close ties to the CIA-financed *Radio Martí* programme, which broadcasts over Cuba promoting counterrevolution.

Meanwhile, the Center for International Policy's [CIP] Cuba Program was set up and directed by Wayne S Smith, from the Latin American Studies department of John's Hopkins University. A former US diplomat in Cuba in 1959 and again during the Carter years, Smith left Havana in 1982 in protest at the Reagan administration's belligerent foreign policy. CIP's aim was also the normalisation of relations between the US and Cuba.³⁷ Lifting the blockade and integrating Cuba into the 'free' market was the best way to undermine the socialist Revolution and restore capitalism. CIP represented the 'liberal' trend in Cubanology.

³⁵ *Informes Linowitz Documentos*, cited by Rodríguez, *Cubanology*, 28.

³⁶ The Institute is currently housed in *Casa Bacardi*, linked to the Cuban Transition Project which, according to the Institute's website is: 'an important project to study and make recommendations for the reconstruction of Cuba once the post-Castro transition begins in earnest. The project started in January 2002 and is funded by a grant from the US Agency for International Development.' <http://www6.miami.edu/communications/mediarelations/special/cuba/historical1.html>.

³⁷ <http://ciponline.org/aboutus.htm>.

Cubanology became more diverse, with institutional challenges to the original paradigm. In 1988 Nelson Valdés noted:

‘Thus, the search for “impartiality” represented by Pittsburgh was challenged by a liberal program at John’s Hopkins and a conservative one at the University of Miami... It remains to be seen, nonetheless, which of the three programs determines the agenda of Cuban studies in the future. If money is to be the key determinant, then the University of Miami should be in command. It should be noted that the program directed by Mesa-Lago [in Pittsburgh] publishes the highly regarded *Cuba Studies*. John Hopkin's University produces occasional papers. The University of Miami seems to be much more active, sponsoring conferences, symposia, and a monograph series.’³⁸

This demonstrates that the Cubanology paradigm is broad enough to incorporate different trends within the same political standpoint. In 1982, Edward González, on the extreme right of Cubanology, a researcher at the Rand Corporation and professor at the University of California Los Angeles, wrote in a study for the State Department and the US Armed Forces, that:

‘Although the Castro regime continues to be viable, there are now new opportunities for the United States to exploit Cuba’s interests and weaknesses, and as such, to moderate the behavior of Cuba. Recent international and internal changes have heightened Cuba’s vulnerability and provide the United States with more possibilities for its exploitation... future transmissions of *Radio Martí* may create an instrument for the exploitation of political vulnerabilities and for putting the regime on the defensive.’³⁹

³⁸ Valdés, *Paradigms*, 187.

³⁹ Cited by Rodríguez, *Cubanology*, 29.

A key sponsor of the renewed belligerence of Cubanology in the 1980s was the extreme right-wing Cuban American National Foundation (CANF),⁴⁰ whose Bureau for Conferences includes Cubanologists Hugh Thomas, Irving Horowitz, Juan Clark, Luis E Aguilar, Sergio Dias-Briguets and Carlos Rippoll. 'Academic' events anticipating 'transition' in Cuba, were given legitimacy by the participation of Cubanologists. They have been held frequently up to this day.

It is clear that Cubanologists are not homogeneous. Even the use of language delineates clear differences among them. For example, Jorge Domínguez describes Cuba as a 'consultative oligarchy', while Edward González refers to 'Castro's dictatorship'. It is a question of degrees. Essentially, as Rodríguez explains, the political goal remains: 'to prove the inviability of socialism as a political system for Cuba and to portray this system as totalitarian or, at least, undemocratic'. He adds that: 'all Cubanologist work stems from the bourgeois concept of democracy. Cubanologists limit themselves to emphasizing the absence of the formal features of democracy, those present in some capitalist societies.'⁴¹

Cubanologists frequently assert that both internal and foreign policy of Cuba is determined according to Fidel Castro's charisma, ego or psychological state. Mesa-Lago, for example, states that: 'Castro's record shows that, whenever there has been a choice between his country's independence and his own power, he has sacrificed the first for his own gains.'⁴² Edward González states that: 'Castro's imperial ambitions are at the heart of Cuba's interventionist imperative.'⁴³ Valdés points out that this view assumes:

⁴⁰ CANF's predecessor was the Cuban Representatives in Exile (CRE), set up by Pepin Bosch, head of the Bacardi-family Corporation, with members of the CIA, in Miami 1964. CRE was forced to disband in the late 1970s after evidence about its involvement in acts of terrorism against Cuba. CANF has since been linked to similar activities as well as serving as a conduit for funds from the CIA to mercenaries in Nicaragua, El Salvador and Angola. See Hernando Ospina Calvo, *Bacardi: The Hidden War*, trans Stephen Wilkinson & Alasdair Holden, London: Pluto Press, 2002. In 2000 CANF was involved in holding Cuban child Elian Gonzalez in Miami before he was seized by the INS and returned to his father in Cuba.

⁴¹ Rodríguez, *Cubanology*, 30.

⁴² Carmelo Mesa-Lago, *Cuba in the 1970s: Pragmatism and Institutionalization*, New Mexico: Albuquerque, 1974, 136.

⁴³ Cited by Valdés, *Paradigms*, 195.

‘...that Cuba’s foreign policy is guided by the logic of personalism, but the foreign policies of superpowers are not... How these authors know what the perceptions of the Cuban authorities are we are not told. How these authors know whether those perceptions are erroneous or correct is never discussed... Instead of national security, personal power is the key to foreign policy... To imagine the subjective and unconscious influence that hidden drives may have on nationalism apparently is much more interesting than studying the concrete impact that US foreign policy has exerted over this small island. This is the poverty of subjectivism.’⁴⁴

The works of Cubanologists such as Mesa-Lago and González are widely known. Anthony Maingot asserted that: ‘Mesa-Lago and González are experienced students of Cuban affairs; this is reflected in the sober and pondered manner in which they analyze and caution their predictions. They are testimony to the value of area studies, a sense of history, and the interdisciplinary approach.’⁴⁵ In reality, however, these scholars are linked to US government and extremist organisations who work to destroy the Cuban Revolution. This fact undermines claims to impartiality and the utility of their material in this thesis which is set outside the Cubanologist paradigm.

CUBANISTS

The mainstream paradigm set by Cubanologists was inflexible. Scholars were left struggling to explain key events within the paradigm assumptions, in foreign policy for example: Cuba’s conflict with China in 1966, and with the communist parties of Latin America, 1967-1968 and the brief clash with the USSR in 1968. Valdés explained the reactive nature of this scholarship:

‘The fact that Cuba had an African foreign policy was not obvious until troops were sent to Angola. Then many scholars rushed to look at this

⁴⁴ Valdés, *Paradigms*, 190-3 & 206.

⁴⁵ Maingot, *Methodology*, 244.

matter. The relations between Cuba and the nonaligned countries began in 1959. We did not notice for almost twenty years. Fidel Castro had to become the head of the Nonaligned Movement before any studies were produced on the subject. And even now the gaps remain extraordinary. We do not have any works on Cuba's relations with Latin America, Western Europe, or Eastern Europe. The Cuban role in international organizations, including the United Nations remains a virgin region. The reactive nature of scholarship is fairly evident in the flurry of current works [from the mid-1980s] concentrating on Cuba and Central America. Once a crisis disappears, the number of works on the subject dwindles.⁴⁶

The inadequacy of the Cubanology paradigm, in addition to the Cuban efforts to disseminate information about its economic and social welfare successes from the 1970s and the consequently improved access to Cuban society and archives, contributed towards the formation of a new school in the field – Cubanists. Their distinction from Cubanologists is political and in research methodology rather than geographical. An early step in the institutionalisation of this school was the foundation of the Center for Cuban Studies (CCS) in New York in 1972 by scholars, writers, artists and other professionals to support Cuba, counter the US blockade by providing information and organising tours of the island and urging the normalisation of relations between the United States and Cuba.⁴⁷ Yet this group remained on the margins of the mainstream.

In 1988 Rodríguez complained that: 'Cuba is not the transfiguration of a doctrine, nor the reification of a totalitarian philosophy. It is a country. Little is written and even less is published about this real country, whether inside or abroad.'⁴⁸ Cubanists are in the process of filling this void. Cubanists include researchers from across the social science disciplines, as well as historians. Their focus has tended to reflect earlier Revisionist historians' preoccupation with minority and oppressed groups in Cuba, as well as regional and sectoral studies. They tend to be more sympathetic to

⁴⁶ Valdés, *Paradigms*, 195.

⁴⁷ [www.http://www.cubaupdate.org](http://www.cubaupdate.org)

⁴⁸ Rodríguez, *Cubanology*, 128.

the social and economic achievements of the Revolution, stepping back from the ideological battle between capitalism and socialism. The Forum for the Study of Cuba, for example, set up by Antoni Kapcia at Wolverhampton University has a Directory of Cubanists whose specialist areas cover art history, biography, cultural studies, economics, gender studies, history, history of ideas, international relations, labour history, legal studies, linguistics, literature, media studies, music, politics, social policy, sociology, translation studies and women studies.⁴⁹ ‘Emerging from a variety of ideological perspectives, this work has helped make the shortcomings of the Cuban social and human sciences clear to us’, stated Cuban political scientist Hernández: ‘thus serving as a stimulus. It has also contributed to the sum knowledge about Cuban problems.’⁵⁰

On the other hand, the distinction between Cubanologists and Cubanists is by no means clear cut. Authors identified with the separate schools are found on the same contents lists. Direct confrontation between the schools is rare, and differences usually coached in terms of methodology. Although Cubanists may not be so overtly linked to a political regime or ideological battle, they still carry the constraints of their own social and political values and assumptions. Hernández warned that ‘many of those studies are linked to a process of ideological positioning and find their niches within a given marketplace. To that extent, they share some of the characteristics and paradoxes [of the Cubanologists].’ Additionally, he asserted that: ‘among those who do come to Cuba to gather information, some end up collecting merely what they want to find, usually what they need to characterize the system as Stalinist or Fidel Castro as a figure down to his last days in power. Others complain that they are not given the information they need to write in a believable manner about an imperfect society.’⁵¹ Researchers’ access to Cuban society, historical archives and economic data has improved significantly. Nonetheless, methodological problems continue to compound the problems of political bias. Given the highly polemical character of this field, the researcher on Cuba should make a self-

⁴⁹ Kapcia and the forum have relocated to the University of Nottingham. The Forum has been renamed the Cuba Research Forum. <http://www.nottingham.ac.uk/hispanic/CRF/Cuba>.

⁵⁰ Hernández, *Looking*, 124.

⁵¹ Hernández, *Looking*, 124 & 129.

conscious appraisal of their own assumptions, intentions, material and interpretation.⁵²

POLITICAL ECONOMY

The principal and relentless battleground between Cubanologists and Cubanists has been Cuba's economic history, both pre and post-1959. For example, Cubanologist Jaime Suchlicki claims that: 'Batista encouraged the growth of Cuban capital and his return to power stimulated foreign investment... By the end of Batista's rule, Cuba's economy was well into what Walter Rostow has characterized as the take-off stage.'⁵³ In contrast, Cubanist Fred Judson describes the structural weakness of the Cuban economy. 'Batista's own paternalistic economic policies and the state of the economy in 1955-57 also created ambiguities... The general situation can be described as a multi-layered series of crises. Long-term crises characterized the economy, which had a surface and transient prosperity.'⁵⁴ A scholar's assessment of the pre-1959 Cuban economy has a bearing on whether they regard the Revolution to have been accidental: 'at the margins of all objective historic determination', as Rodríguez expressed it, or rather, driven by an economic imperative, the culmination of *cien años de lucha*.⁵⁵ It also influences their evaluation of the post 1959 economic development strategy. For Suchlicki the Revolution interfered with an organic process of economic growth. For Judson it was necessary precondition to removing US penetration as an obstacle to development.

In the 1980s, Cubanists including Andrew Zimbalist and Claes Brundenius set out to challenge the mainstream view that Cuban economic development has been negligible since 1959. Their articles were first published in the by-then 'objective' Pittsburg University's *Cuban Studies*, edited by Mesa-Lago, who they called: 'the

⁵² This thesis has endeavoured to do so in the concluding comments of this chapter.

⁵³ Jamie Suchlicki, *Cuba: From Columbus to Castro*. Washington: Pergamon-Brassey's, 1986, 135.

⁵⁴ Fred C Judson, *Cuba and the revolutionary myth: the political education of the Cuban Rebel Army, 1953-1963*, Colorado: Westview Press, 1984, 95.

⁵⁵ Rodríguez, *Cubanology*, 31.

most prolific and prominent US interpreter of the Cuban economy' whilst setting out to undermine the scholarly value of his work.⁵⁶ In 1988 they published a comprehensive challenge to the Cubanologist paradigm, focussing on political economy.⁵⁷ In exposing the assumptions and undermining the methodology of mainstream Cubanology, their book, intentionally or not, takes a political position in support of Cuba. The timing of this publication was decisive. It was 1988 when Cubanology had propelled to the right under the ascendancy of Reaganism which arguably saw US-Cuba relations at their most confrontational since the Cuban missile crisis of October 1962.

Zimbalist and Brundenius reviewed three economic history papers by Mesa-Lago and Jorge Pérez-López, pointing out numerous methodological and conceptual mistakes and producing their own statistical series depicting a far more optimistic picture of Cuban industrialisation and export diversification, much closer to official Cuban statistics which the Cubanologists claim are manipulated to overstate economic growth. This debate over economic data is partly a result of Cuba's adoption of the Material System of Balances system of national incomes accounting, in line the centrally-planned economies of the Countries for Mutual Economic Assistance (CMEA).

The first study under review was co-authored by Mesa-Lago and Pérez-López for the World Bank: *Study of Cuba's MPS, Its Conversion to SNA and Estimation of GDP/capita and Growth Rates*, published in November 1982. The authors dismissed official Cuban statistics, Soviet statistics, CIA estimates, estimates made by the US Arms Control Development Agency (ACDA), and the World Bank Atlas estimates. Attacking their methodology, Zimbalist and Brundenius complain that: 'To run the test, get an estimate not to your liking, and then find a post hoc rationalization why the test was inappropriate in the first place obviously cannot be justified even by the most liberal interpretations of the scientific method.'⁵⁸

⁵⁶ Claes Brundenius and Zimbalist, 'Cubanology and Cuban Economic Performance', in Zimbalist (ed) *Controversies*, 39.

⁵⁷ The following section draws on Zimbalist and Brundenius' book which presented a key challenge to the Cubanologist paradigm, as represented by Mesa-Lago and Pérez-López.

⁵⁸ Brundenius, *Performance*, 41.

Pérez-López authored the second study with the Wharton Econometrics Forecasting Associates (WEFA) under contract to the US Department of State in November 1983: *Construction of Cuban Activity and Trade Indexes (Final Report of Study to Develop a Methodology for Estimating Cuba's GNP)*. Zimbalist and Brundenius question the: 'puzzling decision to weigh the non-productive service sector as 13.8 percent of the gross value of output. This share is out of line with the estimate made by Mesa-Lago and Pérez-Lopez in their November 1982 World Bank study that this sector's share in 1978 GDP was 30 per cent. Because the authors acknowledge that this sector grew at a considerably faster pace than the material goods producing sector, this lower weight diminishes the aggregate growth estimate.' Criticising one of the central premises of the study, the Cubanists state that: 'There is no *a priori* set of prices that is more "meaningful" than another', and they question the reliance on 1973 Guatemalan prices as proxy for Cuban prices: 'Why did WEFA choose Guatemala of all countries? The answer can only elicit wonderment'.⁵⁹ Zimbalist and Brundenius closely scrutinised the data inputs to reveal numerous problems, outright mistakes as well as methodological weaknesses, leading them to conclude: 'We do not claim that the data have been deliberately manipulated in order for WEFA to prove the point that growth in Cuba has been slower in the 1970s than claimed by official statistics and other authors, but the errors previously discussed are sufficiently serious to disqualify the report.'⁶⁰

Finally, the Cubanists reviewed Mesa-Lago's paper to the Vanderbilt Conference in November 1983 which claimed that Cuba has sacrificed economic growth to achieve equity: 'The problem with Mesa-Lago's calculations in this instance is straightforward', stated Zimbalist and Brundenius, asserting that his findings: 'are purely a result of accounting practices and do not represent a real structural shift in the economy... He supports this contention with two misleading claims.'⁶¹ Nonetheless, the paper's claim that the Cuban economy was less industrialised by the

⁵⁹ Brundenius, *Performance*, 49-50.

⁶⁰ Brundenius, *Performance*, 52.

⁶¹ Brundenius, *Performance*, 59-60.

early 1980s than before the Revolution was reproduced in a *Wall Street Journal* article.⁶²

Zimbalist and Brundenius conclude that: 'Mesa-Lago and Pérez-Lopez present a distorted picture of Cuban economic performance. It is our hope that the foregoing discussion will help to redress these distortions and contribute to a more dispassionate and rigorous analysis of the Cuban economy.'⁶³ Clearly no set of statistics and extrapolations in Cuba studies can be accepted without circumspection. It is also clear that, however carefully formulated, no set of statistics produced will be accepted by all schools within Cuba studies.

SOVIETISATION THESIS

Linked to this economic history debate, because of the level of trade and financial support from the Soviet Union, is the Sovietisation thesis. In the Cubanologists' paradigm, Cuba was financially and politically dependent on, and dominated by the Soviet Union which had a patron-client relationship with Fidel Castro. Cuba operated: 'within parameters set by the Kremlin'.⁶⁴ Cuba was portrayed as a 'satellite' and its foreign policy, particularly intervention in Africa, as a proxy of the USSR's foreign policies. This interpretation pervades both scholarly and popular understanding of the Cuban Revolution. Another view echoed across the historiographical schools is that post-1959 Cuba is as economically dependent on the USSR as it was before the Revolution on the US. William Leogrande and Julie M Thomas, for example, state that while overcoming dependency was a high priority for Fidel Castro in 1959, Cuba's efforts to do so have been unsuccessful: 'the decision to concentrate on sugar and to trade primarily with the Soviet bloc left Cuba as vulnerable and dependent as it had been prior to 1959.'⁶⁵ This statement assumes

⁶² Brundenius, *Performance*, 59. Roger Lowenstein, 'Sugar is Cuba's Triumph and Its Failure' in *Wall Street Journal*, 3 August 1984.

⁶³ Brundenius, *Performance*, 62-3.

⁶⁴ Raymond W Duncan cited by Valdés, *Paradigms*, 207.

⁶⁵ William Leogrande and Julie M Thomas, 'Cuba's Quest for Economic Independence', *Journal of Latin American Studies*, Vol. 34 (2002), 339.

that Cuba had far more choice of trading partners and export commodity than the reality of underdevelopment, the US blockade and the Cold War allowed. This doctoral research provides rich material to challenge that assumption and illustrates how development strategies had to be adjusted to these obstacles.

Cubanologists who have recognised Cuba's social welfare achievements or economic growth have attributed these to the massive Soviet aid received. Whilst agreeing that the Cuban economy would be different without significant Soviet aid, Andrew Zimbalist stipulated that:

'First...the magnitude of this aid is vastly overstated by false methodology. Second, even if the exaggerated aid figures were accepted, on a per capita basis Cuba would still be getting less in CMEA aid than many other Latin America economies receive in Western aid. Third, if one is attempting to disentangle the sources of Cuban growth and to isolate its domestic and foreign components, it is hardly sufficient to consider only the beneficial effects of Soviet aid. One must also consider the monumental and ongoing costs to Cuba of the US blockade. In 1982 the Cubans estimated these cumulative costs to be approaching \$10 billion.'⁶⁶

The doctoral research adds to Zimbalist's analysis by highlighting the problems associated with the shift of trade to the socialist bloc. The Sovietisation thesis depicts a trade-off whereby Cuba allowed both domestic and foreign policy to be determined by the requirements of the Soviets in exchange for massive aid and favourable trading conditions. Changes in economic management structures in Cuba are understood to be the result of Soviet pressure to copy its own socialist system. This thesis gained strength when Cuba adopted the Soviet Planning and Management Plan in the 1970s. Sovietisation meant the institutionalisation of the Cuban Revolution, along the lines of the Soviet Union. Thus in the mid-1970s, Irving Louis Horowitz

⁶⁶ Andrew Zimbalist, 'An Overview', Zimbalist (ed) *Controversies*, 8. By 2002 the Cuban government claimed the cost of the blockade had reached \$50 billion.

stated that: 'The Cuban Revolution begins to identify with the needs of Soviet foreign policy'.⁶⁷ While Mesa-Lago stated that the Soviets' increasing influence over Cuba: 'has helped to moderate the island's foreign policy.' And concluded that: 'Sad as it is, the United States is better off dealing with a Soviet-dependent Castro than with him loose.'⁶⁸ Valdés retorted that: 'This Manichean approach (Castroite independence with irrationality versus Cuban dependence on Soviets with rationality) put scholars in an unenviable and ridiculous position... Sovietization as a moderating influence did not last long as a thesis. It simply made everyone working on Cuba uncomfortable.'⁶⁹ The collapse of the Soviet bloc has left Cubanologists struggle to explain Cuba's survival and development.⁷⁰

CONCLUSION

In 1978 Anthony Maingot complained that: 'sixteen years after the Cuban Revolution was declared Marxist-Leninist there is yet to be available in English any significant body of literature on the Revolution that is Marxist in methodology.'⁷¹ Almost three decades later there are still few such contributions which can boast the methodological rigor of academic social science research. Most 'Marxist' material is marginalised by existing scholarly paradigms, circulating in non-academic fields among leftists, whether critics or supporters of the Cuban Revolution. However, Maingot's statement about Marxist methodology needs to be qualified, because the distinction between bourgeois and Marxist paradigms is not so clear.

Marx's analytical methodology is based on historical material. Eric Hobsbawm gave personal testimony to the power of historical materialism which, he said: 'represented concentrated charges of intellectual explosive, designed to blow up

⁶⁷ Irving Louis Horowitz, 'Authenticity and Autonomy in the Cuban Experience' in *Cuban Studies*, Vol 6, 1 (Jan 1976), 71.

⁶⁸ Mesa-Lago, *Pragmatism*, 135.

⁶⁹ Valdés, *Paradigms*, 207.

⁷⁰ For example, Lawrence Whithead, *On Cuban Exceptionalism*. Paper presented to the conference on Cuba's Integration into the International System, 23 March 2003.

⁷¹ Maingot, *Methodology*, 227.

crucial parts of the fortifications of traditional history...[it was an] immense liberating force'.⁷² However, Marx himself pointed out that he did not 'discover' many of the formulations which are associated with his paradigm:

'Bourgeois historians had described the historical development of class struggle long before I came along, and bourgeois economists had laid bare the economic anatomy of this struggle. My contributions were to prove (1) that the existence of classes is directly linked to specific historical stages in production methods, (2) that class struggle will inevitably lead to a dictatorship of the proletariat, and (3) that this dictatorship itself forms only a transition to the abolishment of classes and to a classless society.'⁷³

Pointing out that much of what goes under the banner of Marxist analysis is actually the product of bourgeois thought, Ernst Nolte stated that the irreconcilable difference is that bourgeois historians do not believe in Marx's prediction of a classless society: 'Scepticism toward this idea of a classless society – an idea that is at the heart of Marxism – forms the one real dividing line between bourgeois and Marxist historiography.'⁷⁴

This thesis, then, adopts many concepts which are generally assumed to be Marxist, but are not necessarily so. It frames development through the panorama of class struggle and stages of development of the productive forces. It adopts vocabulary such as 'bourgeois', 'petit-bourgeois', 'working class', 'vanguard', 'counter-revolutionary', 'dialectics', 'dictatorship of the proletariat' and 'surplus value'. In addition it uses terms which formed part of the language of the Cuban revolutionaries, such as 'cadre' [leader], 'compañero' [colleague – used in the sense of 'comrade'], 'nucleus' [leadership group] and 'consciousness' [social conscience and commitment to the Revolution]. Arguably, the sense in which this thesis can be

⁷² Eric Hobsbawm, *On History*, London: Weidenfield & Nicolson, 1997, 147.

⁷³ Karl Marx, 'Letter to Weydemeyer', 5 March 1852, cited by Ernst Nolte, 'The Relationship between "Bourgeois" and "Marxist" Historiography', in *History and Theory*, Vol 14: 1 (Feb 1975), 66.

⁷⁴ Nolte, *Relationship*, 66.

said to adopt a Marxist methodology is in the basic premise that to understand Guevara's contribution to economic management in Cuba, it is also necessary to analyse his contribution to socialist political economy, and vice versa. In other words, it presents his theory as a dialectical function of his action. Hobsbawm said:

'Marxism, the most practically influential (and practically rooted) school of theory in the history of the modern world, is both a method of interpreting and of changing it, and *its history must be written accordingly*... It must also deal with the movements inspired, or claiming to be inspired by the ideas of Marx, and with the revolutions in which Marxists have played a part, and with the attempts to construct socialist societies by Marxists who have been in a position to make such attempts.'⁷⁵

To write such a history is the goal of this thesis. It presents an immanent critique, accepting the basic assumptions articulated by Guevara and post-1959 Cuban leaders, and assesses developments and achievements on the basis of the aims and objectives as set out by the Revolution itself. Thus, a concern with GDP statistics is replaced by a focus on the desired outcomes: national independence with economic and social justice, a new consciousness and social-relations integral to the construction of socialism.

The following chapter in Part One reviews the existing literature on Ernesto 'Che' Guevara, demonstrating that despite huge popular interest in this Argentinian revolutionary, there remains a gap in our knowledge of his life and contribution from 1959 to 1965, which this thesis has set out to fill.

⁷⁵ Eric Hobsbawm, *The History of Marxism*, Vol 1, London: Harvester Press, 1982, vii-viii. My italics.

CHAPTER 3

Ernesto 'Che' Guevara: the existing literature

*'...what I ask, modestly, in this 20th anniversary [of Guevara's death], is that the economic ideas of Che be known; be known here, be known in Latin America, be known in the world: in the developed capitalist world, in the Third World and in the socialist world.'*¹

*'Che was more than just a martyr, more than just a heroic guerrilla fighter, he was also a Minister in the Cuban government and developed many ideas on how to build the new socialist society...we must study and learn from his thoughts.'*²

In 1973, Michael Lowy wrote that it was: 'necessary and urgent to suggest the initial outlines of a systematic study of Che's thought, which is both orthodox Marxist and at the same time fiercely anti-dogmatic.'³ However, his own book on *The Marxism of Che Guevara* thematically summarised several articles by Guevara, but did not juxtapose these theoretical ideas with his practical work in Cuban industry 1959-1965. Two decades later, Matt Child echoed this concern: 'Guevara's works have not been subjected to scholarly criticism, most commentary simply referring to his unorthodox Marxism.'⁴ This thesis sets out to conduct such a scholarly study, based on access to new archive material and interviews. It examines Guevara's contribution to socialist political economy in the context of his role in industrial organisation and economic development in Cuba. An overview of the existing literature about Guevara demonstrates the importance and originality of this contribution.

¹ Fidel Castro Ruz. 'Discurso pronunciado por Fidel Castro el 8 de Octubre de 1987', in David Deutschmann and Javier Salado (eds), *Ernesto Che Guevara: El Gran Debate: Sobre la Economía Política*, Melbourne: Ocean Press, 2003, 406.

² Venezuelan President Hugo Chávez Frías, speech on May Day 2005.

³ Michael Lowy, *The Marxism of Che Guevara: Philosophy, Economics, and Revolutionary Warfare*, trans. Brian Pearce, London: Monthly Review Press, 1973, 9.

GUEVARA AS GUERRILLA

Popular hagiography, political discourse and academic presentation has stylised Guevara as a guerrilla commander and armed internationalist. Guevara himself contributed to this caricature, by writing numerous accounts of the war against Batista in the Cuban press and publishing *Guerrilla Warfare* in 1961 to promote his *foco* theory that a 'vanguard' of armed fighters could spark successful revolutionary movements in Latin America. This was formalised by the French Marxist Régis Debray and years of debate over the *foco* theory and the Cuban road to socialism, fuelled by attempts to apply it elsewhere in Latin America, cemented Guevara's immortalisation as an armed revolutionary. His disappearance from Cuba, the reading of his farewell letter to Fidel Castro in 1965, his message to the Tricontinental calling for 'many Vietnams' and his capture and execution in Bolivia where he was leading a *foco* group in 1967, have placed blinkers on history, blinding it to other aspects of this multi-faceted man. Guevara's nationality Latin-Americanised the impact of this image; his contribution to the war in Cuba was reminiscent of the continent's independence heroes, such as Simón Bolívar and Máximo Gómez, thus strengthening Guevara's claims about the universality of the Cuban model. In his critique of the *foco* theory, Matt Childs emphasises the impact on the Latin American left of Cuba's revolutionary socialism, which undermined the communist parties engagement with parliamentary politics as the road to power and the broad alliances to the right which emerged from the 1940s popular front tactics to oppose fascism.⁵

⁴ Matt D Childs, 'An Historical Critique of the Emergence and Evolution of Ernesto Che Guevara's Foco Theory' in *Journal of Latin American Studies*, Vol 27: 3 (1995), 599.

⁵ Childs argues that the *foco* theory evolved between 1960 and 1967, in line with Guevara's own experiences. First, 'Sierrisation' (1960-2) when Guevara incorporated peasant and working class *compañeros* from the Rebel Army into his new tasks in government and over-stressed the contribution of the Sierra forces in the revolutionary struggle in relation to that of the more middle class forces in the cities – thus strengthening the left wing push for the radicalisation of the Revolution. Second, 'Marxianisation' (1962-5), when Guevara was involved in the Great Debate with proponents of the Soviet economic management system. Third, 'Internationalisation' (1965-7), when he joined the struggle in the Congo and Bolivia. Childs concludes that: 'The theoretical distance travelled by the *foco* theory from the Cuban Revolution to Guevara's death in Bolivia reflects a considerable distortion of the Cuban experience.' Childs, *Foco*, 622,

Arguably, it served the Cuban government that Guevara was consigned to history as guerrilla strategist in his combat uniform; the hero who sacrificed his life to fight US imperialism, whose attacks continued. Guevara as minister had confronted just not the imperialist enemy, but also the socialist allies, over their approach to socialist construction. In the context of Cuba's political and economic integration into socialist bloc it was hardly expedient to portray 'Guevara the Marxist theorist', who is also 'Guevara the critic of Soviet political economy'. However, from the second half of the 1980s as Cuba pulled away from the Soviet system in a period known as Rectification of Errors and Negative Tendencies, Guevara the economic theorist and Soviet critic found a voice in Cuba. His criticism of the Soviet economic management system legitimised the rejection of that model.

GUEVARA'S WRITINGS AND SPEECHES

The publication of writings and speeches by Guevara has done little to challenge the characterisation of Guevara as guerrilla. During his public life, Guevara made around 200 speeches and interventions at conferences in more than a dozen countries.⁶ A very small proportion of those are published in English, mainly his *Reminiscences of the Cuban War* and *Guerrilla Warfare* and speeches from international meetings calling for anti-imperialist solidarity and resistance. A greater selection of his work has been published within Cuba. In his thematic dictionary of Guevara, Carlos Jesús Delgado Díaz estimated that nearly 540 documents from Guevara have been published on the island: speeches, articles, poems, prologues, editorials, articles, books, dedications and letters.⁷ Dividing the content into four themes, Delgado demonstrates that: 41.5% concerned the history of the Cuban Revolution; 20% guerrilla warfare; 13% socialism; and 25% other themes. That means that over 60% related to military issues. Almost 90% of this work was produced between 1959 and

⁶ *Mi Guevara*. Suplemento Especial. Revista Cuba Internacional, La Habana: Prensa Latina, 1997, 17.

⁷ Carlos Jesús Delgado Díaz, *Diccionario Temático: Ernesto Che Guevara*, La Habana: Ciencias Sociales, 2000, 349.

1967 and there is an equal balance between Guevara's written and oral product. This is exceptional, stated Delgado: 'Considering the social conditions of the historical moment and the importance and presence of oratory in the political discourse of the Cuban Revolution. His preoccupation for recourse to the printed word to express his revolutionary political thought, whether that was theoretical articles or journalism, is notable.'⁸

Delgado's survey includes material that was not published for public circulation, for example the transcripts of the Ministry of Industries (MININD) internal bimonthly meetings, which this thesis draws on extensively, but which have not formed part of the mainstream appreciation of Guevara's works. Apart from the original print, few of the documents listed have been incorporated in collected works. In the 1970s two compilations were published in Havana; half the documents were speeches and articles on socialist construction and the rest of revolutionary war and internationalism.⁹ These did not include material by Guevara kept in archives.

The largest compilation of Guevara's work published in English was edited by John Gerassi in 1968, before the selected works had been published in Cuba.¹⁰ This included several articles and speeches about socialist transition and the work of MININD. In 1971, Bertram Silverman published five theoretical articles, already in Gerassi's book, which Guevara contributed to the Great Debate 1963-5.¹¹ In 1987 Pathfinder published *Che Guevara and the Cuban Revolution*.¹² Of 27 articles, just two relate to socialist theory or industry. A decade later, Ocean Press produced a *Che Guevara Reader*, which was basically a reprint of the Pathfinder book.¹³ Pathfinder

⁸ Delgado, *Diccionario*, 352.

⁹ *Ernesto Che Guevara: Obras Escogidas 1956-67*, tomos 1 & 2, La Habana: Casa del las Américas, 1970 & *Ernesto Che Guevara: Escritos y Discursos*, tomos 1-9, La Habana: Ciencias Sociales, 1977. Orlando Borrego's compilation is not included here as only 200 copies were printed and distributed selectively.

¹⁰ John Gerassi (ed), *Venceremos! The writings and speeches of Che Guevara*, 1st ed. London: Weidenfield & Nicolas Limited, 1968.

¹¹ Bertram Silverman (ed), *Man and socialism in Cuba: The Great Debate*, New York: Atheneum, 1971.

¹² David Deutschmann (ed), *Che Guevara and the Cuban Revolution: writings and speeches of Ernesto Che Guevara*, Melbourne: Pathfinder/Pacific and Asia, 1987.

¹³ David Deutschmann (ed) *Che Guevara Reader: Writings and Speeches on Guerrilla Strategy, Politics and Revolution*, Melbourne: Ocean Press, 1997.

and Ocean Press have a common history and editor and between them have published more English-language material from Cuba – about and by leading revolutionaries – than anyone else. Ocean Press's catalogue includes Guevara's writings on Latin America, his *Diaries from the Congo* guerrilla campaign, which did not appear in the 1970s Havana compilations mentioned, a book about the FBI's files on Guevara, and a memoir about him by Fidel Castro.¹⁴ However, these works have not entered the academic mainstream.

In 2002 Ocean Press launched a project in collaboration with the Che Guevara Study Centre in Havana, directed by Guevara's widow Aleida March, to 'prepare Che's complete writings for publication in a large number of thematic and other collections.'¹⁵ Most of the titles are reissues of material previously published. However, most significant for this thesis, the project includes 1) critical notes on political economy: *Apuntes Críticos de la Economía Política*, and 2) philosophical notes, both based on archive material. A Cuban/Ocean Press edition of the former was published in early 2006.¹⁶ The latter is not due until 2007.

The *Apuntes* includes the full text of Guevara's critique of the *Soviet Manual of Political Economy*, which Orlando Borrego, his closest collaborator in Cuba 1959-1965, had already summarised in his book *El Camino del Fuego* in 2001.¹⁷ In addition, it includes extracts from the transcripts of the bi-monthly meetings of MININD, the full text of which are in volume six of Borrego's limited edition of Guevara's work compiled in 1967 and five theoretical articles he contributed to the Great Debate on socialist transition previously published in Cuba in the 1970s Havana compilations and in English by Gerassi and Silverman. These articles have been republished by Ocean Press and Ciencias Sociales collaboratively in 2003.¹⁸ The *Apuntes* also contains: a biographical article by Guevara on Marx and Lenin; a

¹⁴ <http://www.oceanbooks.com.au>

¹⁵ *A New Publishing Project of the Works of Che Guevara*, press release, 8 October 2002, Ocean Press. The release date was timed to coincide with the 35 anniversary of Guevara's death.

¹⁶ Ernesto Che Guevara, *Apuntes Críticos a la Economía Política*, La Habana: Ciencias Sociales, 2006.

¹⁷ Orlando Borrego, *El Camino del Fuego*, La Habana: Imagen Contemporánea, 2001.

¹⁸ Deutschmann (ed), *Ernesto Che Guevara: El Gran Debate: Sobre la Economía Política*. Melbourne: Ocean Press, 2003.

fragment of a letter written to Fidel Castro in April 1965; notes on the economic philosophy of Marxism; five unpublished letters and part of an interview given in Cairo.

The material in *Apuntes* is presented in an edited form, without commentary or analysis by the editors apart from an introductory note. The stated aim of the Che Guevara Study Centre is that: 'this series – by presenting Che in his own words – will contribute to a better understanding of Che's thoughts, allowing the reader to delve into his cultural depth, his incisiveness, his irony, his passion and his astute observations – that is to say, the living Che.'¹⁹ However, a lot of historical background and theoretical knowledge is assumed of readers in order to appreciate Guevara's contribution to socialist political economy. Furthermore, an essential aspect of Guevara's methodology is lost: the test of theory in practice and experience as the basis for theoretical development.

In 2000, the *Diccionario Temático Ernesto Che Guevara*²⁰ provided an historical context to Guevara's important speeches, with summaries and some direct quotes. It includes descriptions of key personalities and their relationship to Guevara. This is a useful resource providing vital historical contextualisation to other inedited material available, for example, the material in *Ernesto Che Guevara: Ciencia, Tecnología y Sociedad 1959-1965*, published subsequently in 2003, which thematically and chronologically organises extracts from Guevara's writings and speeches.²¹ The 476 extracts were derived from 110 bibliographic sources, so most sources were used several times with different extracts under various thematic headings. The themes exclude Guevara's views on guerrilla warfare and international anti-imperialism, concentrating on his economic ideas, explaining policy formulations, discussions about industrial organisation, technology, education and development. The thematic schema is imposed on the ideas by the editors. Relying on extracted quotes limits the sources utility because the way an argument is developed and linked to other themes

¹⁹ Ocean Press, *Statement*.

²⁰ Delgado, *Diccionario*.

²¹ *Ernesto Che Guevara: Ciencia, Tecnología y Sociedad 1959-1965*, La Habana: Editorial Academia, 2003.

is vitally revealing. Extracts preclude this type of analysis. Nonetheless this publication is an important contribution to the critical re-examination of Guevara. It has been used as a reference in the thesis research, indicating the sources in which Guevara dealt with different themes. The original material could then be sought and examined.

BIOGRAPHIES OF GUEVARA

According to the *Diccionario* between 1967 and 1995 eight significant bibliographical studies of Guevara were published.²² However, the list excludes several significant texts which presented an overview of all, or aspects of Guevara's life and work. Among them was Andrew Sinclair's contribution, written as part of the Modern Masters series, to summarise Guevara's political and economic philosophies and emphasise his influence in the Cuban Revolution.²³ While there is no 'official' Cuban biography of Guevara as such, there have been bibliographical compilations.²⁴ There are more Cubans works related to specific periods of his life, particularly military campaigns. Outside of Cuba, in 1995 alone another six biographies were published or being prepared for publication.²⁵ This reflected a rush to publish by the 30th anniversary of Guevara's death in 1997 and exploit renewed public interest. Three mainstream biographies entered the international English market in 1997.²⁶ Whilst detailing Guevara's upbringing and youth, these biographies barely touch on his contribution to the socialist political economy debates or industrial organisation and economic management in Cuba. The

²² Daniel James, Iosiv Grigulevitch, Enrique Salgado, Horacio Daniel Rodríguez, Ricardo Rojo, Ernesto Guevara Lynch, Hildea Gadea, Alberto Granado - half of these were testimonies by Guevara's family and friends.

²³ Andrew Sinclair, *Guevara*, London: Fontana, 1970. Other significant bibliographical studies from this period include I Lavretsky's, *Ernesto Che Guevara*, Moscow: Progress Publishers, 1976 & Hugo Gambini's *El Che Guevara*, Buenos Aires: Paidós, 1968.

²⁴ Jesus Soto Acosta (ed): *Che: Una Vida y Un Ejemplo*, La Habana: Comision de Estudios Históricos de la UJC, 1968 & Luis Agüero (et al), *Che Comandante: Biografía de Ernesto Che Guevara*, México: Diógenes, 1969.

²⁵ Jean Lok Cormier, Pierre Kalfon, Henry Ryan, John Lee Anderson, Jorge G Castañeda and Paco Ignacio Taibo II. See Delgado, *Diccionario*, 348-9.

²⁶ Jon Lee Anderson, *Che Guevara: A Revolutionary Life*, London: Pantheon Press, 1997, Jorge Castañeda, *Compañero: The Life and Death of Che Guevara*, London: Bloomsbury, 1997 & Paco Ignacio Taibo II, *Guevara: Also known as Che*, New York: St Martin's Griffin, 1997.

mainstream audience, therefore, generally remains ignorant about Guevara's involvement in these areas.

Living to tell: biographies of Guevara's colleagues

After Guevara's execution in 1967, several of his *compañeros* and family wrote about their relations and experiences with him. None of these early accounts included his work in the Cuban government so they are of limited value to this thesis. Provided an audience by the reflected glory of their association with Guevara, these authors tended to assert that he was exceptional at a young age and emphasise their own influence on his formation, or his on theirs.

More recently, there has been a trickle of memoirs and personal accounts produced by Guevara's colleagues. Most are limited to the revolutionary struggle leading up to the Revolution in 1959, or the guerrilla campaign in Bolivia 1966-7, printed in limited runs – as few as 500 copies – in Cuba only. There is a conscious push to record individual accounts as a contribution to collective history, a process being promoted by the *Martiana* history groups run by the *Asociación de Combatientes*; survivors from 1950s revolutionary war.²⁷ Director of the national Martí programme, which organises these groups is Armando Hart, a founding member of the 26 July Movement (M26J) in 1953, the Revolution's first Minister of Education and then Minister of Culture. His autobiographical based account *Aldabonazo*, published in 1997, does not extend into the post-1959 period.²⁸ Head of the group in Havana, Enrique Oltuski, another leading member of the M26J's urban wing, published *Gente de Llano* in 2000.²⁹ Although this mentions his interaction with Guevara, the action takes place before 1959. Oltuski's *Pescando Recuerdos*, published 2004, includes anecdotes about Guevara post-1959, but has little factual information and therefore is

²⁷ Named in honour of national hero José Martí who died fighting for independence from Spain in 1898. I attended three historical seminars between 2005 and 2006.

²⁸ Published in English in 2004 as *Aldbonazo: Inside the Cuban Revolutionary Underground 1952-58, a participants account*, London: Pathfinder, 2004.

²⁹ Enrique Oltuski, *Gente del Llano*, La Habana: Imagen Contemporánea, 2000. Published in English as *Vida Clandestina*, New York: Jossey-Bass, 2002.

of limited historical use for this thesis.³⁰ Other *compañeros* of Guevara have produced memoirs in the last few years which either reviewed the war against Batista (Enrique Acevado and Arnol Rodríguez Camps), other military missions (Jorge Risquet), or recorded the first years of the Revolution without focusing on Guevara's contribution in the economic sphere (Antonio Núñez Jiménez and Luis M Buch Rodríguez).³¹

In 2001, Orlando Borrego published *El Camino del Fuego*, an account of his work as Guevara's deputy in the Department of Industrialisation and in MININD.³² Borrego's account has been the most useful bibliographic work for this thesis. It combines information about Guevara's daily responsibilities and working relationships, insights into the evolution of his ideas on socialist construction and some outline of policies or projects put in place. Borrego also published a second book of anecdotes.³³ Tirso Saénz, MININD's Vice Minister of Technical Development published an account which focuses on his own integration in the Revolution and details the work of the research and development institutes Guevara set up.³⁴ However, it does not directly contribute to understanding Guevara's theoretical analysis or political positions. In 2005, Omar Fernández Cañizares wrote about his three-month 'good will mission' to the non-aligned countries with Guevara in 1959.³⁵ Another member of the MININD's Management Council, Ángel Arcos Bergnes, has a book due for publication in early 2007. In summary, this biographical material provides useful descriptive detail and rich human content to research into MININD and developments Cuba at large. More will no doubt follow, most circulated in limited Spanish editions within Cuba. It is clear that protagonists are

³⁰ Enrique Oltuski, *Pescando Recuerdos*, La Habana: Editora Abril, 2004.

³¹ Antonio Núñez Jiménez Enrique, *En Marcha con Fidel 1960*, La Habana: Ciencias Sociales, 1998; Enrique Acevado, *Descamisado*, La Habana: Editorial de Ciencias Sociales, 2000; Arnol Rodríguez Camps, *Operación Fangio*, La Habana: Ciencias Sociales, 2005; Jorge Risquet Valdés, *El Segundo Frente del Che en el Congo*, La Habana: Editora Abril, 2000; Luis M Buch Rodríguez & Reinaldo Suárez Suárez *Otros Pasos del Gobierno Revolucionario Cubano*, La Habana: Ciencias Sociales, 2002.

³² Borrego, *Camino*.

³³ Borrego, *Che: Recuerdos en Ráfaga*, La Habana: Ciencias Sociales, 2004.

³⁴ Tirso W Saénz, *Che Ministro: Testimonio de un Colaborador*, La Habana: Ciencias Sociales, 2005.

³⁵ Omar Fernández Cañizares, *Un Viaje Histórico con el Che*, La Habana: Ciencias Sociales, 2005.

racing to record their personal accounts of historical events, encouraged by their peers and pressured by a sense of their own mortality.

Guevara's contribution to socialist political economy and economic management in Cuba

The collapse of Soviet bloc was anticipated and measures taken from 1986 to pull away from the floundering Soviet model were institutionalised as a campaign of rectification, which involved a fresh evaluation and dissemination of Guevara's theories of socialist transition and his economic management system. It was a re-examination endorsed by the Cuban government which vindicated the change of direction. Two compilations of essays and conference presentations were produced on these topics.³⁶ However, these lack details about policy formulations and structures created by Guevara in MININD, nor is there an exploration of the dynamic between the practical policies and the deepening of theoretical concepts which this thesis offers. Most of the contributors in the compilations had probably not had access to the archive material from MININD or Guevara's critique of the *Soviet Manual of Political Economy*, sent by Guevara to Borrego from Prague, as Borrego claimed that he had not granted access to the document to researchers from inside or outside Cuba. The renaissance of Guevara the minister and critic of the Soviet bloc served a political function and the presentations should be expected to reflect this motivation. These books are out of print in Cuba and were neither translated nor published abroad.

Two studies of Guevara's ideas won awards in the annual Casa de Las Americas competition during the Rectification period: *El Pensamiento Económico de Ernesto Che Guevara* by Cuban economist Carlos Pérez Tablada, and *Che, el Socialismo y Comunismo* by Cuban philosopher Fernando Martínez Heredia.³⁷ Both books

³⁶ *Pensar al Che, Los Retos de la Transición Socialista*, Tomos I & II, La Habana: Editorial José Martí, 1989 & *Conferencia Teórica sobre el Pensamiento Económico del Comandante Ernesto Che Guevara, memorias*, La Habana: Editora Política, 1990.

³⁷ Carlos Pérez Tablada, *El Pensamiento Económico de Ernesto Che Guevara*, La Habana: Casa de las Américas, 1987 & *Che Guevara: Economics and Politics in the Transition to Socialism*, London:

succinctly summarise Guevara's theoretical conceptions but hardly consider the policy formulations within MININD which stemmed from them. They lack an examination of how practical experience reflected back on Guevara's further theoretical developments.

In addition to the articles published as part of the Great Debate, several works deal with separate aspects of Guevara's theoretical ideas, most of them concerned with the argument about incentives. In the literature review of her doctoral thesis on the Great Debate, Sally Gainsbury stated that: 'analyses of the Debate have predominantly fallen into two categories: those who have viewed the Debate as one between committed ideologists on the one side and pragmatic economists on the other; and those who viewed it as an intellectual mask for political rivalries'. She concluded that both interpretations are inadequate.³⁸ However, neither Gainsbury nor any of the literature she cites systematically examines the practical policies adopted in an attempt to concretise the theoretical ideas expressed by either side during the Debate. In his review of *The Theory of Moral Incentives in Cuba*, Robert Bernardo does give useful detail about wage and incentives structures to which Guevara contributed. However, the study does not explain how Guevara's ideas on incentives were related to his integral analysis of socialist political economy or how they were linked to his ideas about, for example, administrative controls, as this thesis does.³⁹ Bernardo's methodology, using a capitalist paradigm concerned with 'market allocations', creates an awkward juxtaposition between his analysis and the Revolution's own approach to consciousness and incentives which is based on different precepts.

Pathfinder, 1989 & Martínez Heredia, *Che, el Socialismo y Comunismo*, La Habana: Casa de Las Americas, 1989.

³⁸ Sally Gainsbury, *The 'Great Debate' as the Fulcrum of Competing Narratives of the Cuban Revolution*, PhD thesis, Wolverhampton University, 2005.

³⁹ Robert M Bernardo, *The Theory of Moral Incentives in Cuba*, Alabama: University of Alabama Press, 1971.

CONCLUSION

A summary of the existing literature on Guevara demonstrates that over the last 40 years most material produced about him has perpetuated the mainstream image of him as a romantic revolutionary, internationalist and guerrilla fighter. Existing biographies have scant material on Guevara's work in the Cuban government or the theoretical debates in which he engaged. Most memoirs have focussed on other aspects of his life, the most relevant texts having been published since the commencement of this thesis. This has had practical consequences. Without knowledge of Guevara's contribution to socialist political economy and economic management the concrete lessons that can be drawn from his work have been lost. The work focussing on Guevara's theory has failed to link it to the Budgetary Finance System and his practical experiences in Cuban institutions. This thesis proposes to do just that.

PART TWO

Background to the Budgetary Finance System

Prologue

‘The Budgetary Finance System was Che’s great thesis; an economic expression that tested his ideas about linking consciousness and production. Che discovered the Budgetary Finance System in the large imperialist consortia that were directed by a budget managed from the United States. Che posed the need to study how imperialism – capitalism – operated, in order to reorganise these efforts to use them for his own benefit.’¹

The Budgetary Finance System (BFS) emerged as a practical solution to the concrete problems thrown up by the nationalisations of industry during the radicalisation and consolidation of the Revolution. This structure was given a theoretical base as Guevara immersed himself in a study of Marxism and socialist political economy. The apparatus developed out of the necessity to control the economy was complemented by theoretical conceptions about socialist transition. Edison Velázquez, a founding member of the Department of Industrialisation said: ‘Very early on Che had a vision about how to lead industry with a budget; the budgetary system. He started from the Marxist conception that the only way to control the economy is via planning and making a budget.’² The BFS combined budgetary control within an ideological paradigm. In order to understand the policies formulated by Guevara in the Ministry of Industries (MININD), examined in Part Three of the thesis, it is first necessary to understand the historical conditions in which the BFS emerged, and the theoretical analysis of socialist political economy which underpinned it.

Part Two of the thesis serves this function of detailing how Guevara’s BFS was adopted and exploring the practical experiences and theoretical conceptions which

¹ Armando Hart Davalos, interview, 14 March 2006.

² Edison Velázquez, 21 January 2006.

contributed to its formulation. This acts as a bridge to the substantive Part on the economic history of MININD. Chapter 4 summarises Guevara's contributions to the military and political consolidation of the Revolution, as a precondition to Cuba's economic transformation. It discusses the impact of Guevara's experiences on both his theory and practice, outlining his responsibilities with the Revolution from 1 January 1959 until the foundation of the MININD in February 1961: the agrarian reform law, the overseas trade missions, the nationalisations, his work as President of the National Bank and as head of the Department of Industrialisation. Chapter 5 examines Guevara's written contribution to the Great Debate on socialist transition which took place in Cuba 1963-1965. The analysis of his critical theory establishes the paradigm within which the practical policies in MININD are consequently assessed.

CHAPTER 4

Revolutionary consolidation and the emergence of the Budgetary Finance System

‘If the armed struggle in the mountains and the cities against the tyranny had been exhausting, the first year of liberation represented a battle without respite to reorganise the country, apply revolutionary justice and respond to the beginnings of enemy aggression.’¹

This chapter presents a thematic examination of Guevara’s responsibilities in Cuba between January 1959 and the foundation of the Ministry of Industries (MININD) in February 1961, demonstrating his centrality in driving the structural changes which transformed Cuba. It explores how his military, political and economic experiences contributed to organisational and theoretical ideas integral to his comprehensive economic management system; the Budgetary Finance System (BFS).

In February 1961, the establishment of new institutions was announced: MININD, the Ministry of Foreign Trade and the Ministry of Internal Trade. These were necessary to administer nationalised industries and introduce a planned economy. Other existing institutions were transformed: the Treasury Ministry, National Bank, the Bank for Foreign Trade, and the Central Planning Board (JUCEPLAN). Edward Boorstein, a US economist working as an advisor to Cuban planning bodies wrote that: ‘The official announcement that the Revolution was socialist did not come until mid-April, at the time of the Bay of Pigs invasion. But already in February laws for a socialist reorganization of the government were coming out in the *Gaceta Oficial* [Official Gazette]. These laws were not drafted the night before their promulgation.’² Boorstein’s first hand account in *The Economic Transformation of Cuba* gives a

¹ Orlando Borrego, *El Camino del Fuego*, La Habana: Imagen Contemporanea, 2001, 11.

² Boorstein, *The Economic Transformation of Cuba*, London: Modern Reader Paperback, 1969, 151.

fascinating insight into the problems encountered by the revolutionary government, how and why socialist planning was adopted and the many mistakes and achievements which accompanied this process.

The intention here is not to narrate this history, or analyse the succession of new laws, resolutions and decrees issued by the revolutionary government: 693 of them in 1959 (almost two a day), 229 in 1960 and 93 in 1961.³ Rather it is to stress how developments within Cuba, in international relations and in the challenges which Guevara faced compelled him to develop an approach to socialist transition which was distinct and alternative to that in the existing socialist countries.

In January 1959, Guevara was among the most influential individuals in Cuba. By the end of the year he was president of the National Bank of Cuba (NBC) and head of the Department of Industrialisation. However he held other responsibilities in his period about which little is known and less written. These are summarised below under three categories: military, political and economic. The research has largely relied on accounts of Guevara's colleagues, because although there is an abundance of historical literature on this tumultuous period of Cuban history, and even general biographical details about Guevara's life, there is scant material documenting or analysing work in the economic sphere. In contrast to his work with MININD there are no internal meeting transcripts, management council reports or manuals for this period. The principal sources of information are interviews, speeches, articles, memoirs, and Cuban media from the period.⁴

A summary of the economic situation in January 1959 demonstrates the problems which confronted the new government as Batista's regime collapsed. Interpretations of the socio-economic and political situation in Cuba constitute an area of controversy in the historiography. Much analysis is based on two sources published in the US: the International Bank for Reconstruction and Development (IBRD) *Report of the Mission to Cuba*, July 1951 and the US Department of Commerce's

³ Orlando Valdés, *Historia de la Reforma Agraria en Cuba*, La Habana: Ciencias Sociales, 2003, 2.

⁴ There is a great deal of collaboration and no significant discrepancies within the interview material.

Investment in Cuba: Basic Information for United States Businessmen, July 1956.⁵ In general terms, the situation in the 1950s can be summarised thus: structural imbalances, underdevelopment with pockets of technologically advanced foreign owned industries, endemic under-employment, severe rural poverty and a lack of domestic capital and investment; dependent economy, heavily reliant on imports and exports, especially sugar-related, domination of trade by the US and most important and complex industries technologically dependent on the US. Boorstein argued that US imperialism had locked Cuba into a structure of underdeveloped, mono-crop dependency:

‘The central fact about the Cuban economy before the Revolution was neither its one crop concentration on sugar, nor the monopoly of most of the agricultural land by huge *latifundia* [plantations], nor the weakness of national industry, nor any other such specific characteristic. Until the Revolution, the central fact about the Cuban economy was its domination by American monopolies – by American imperialism. It was from imperialist domination that the specific characteristics flowed. Unless that it recognized, the Cuban revolution cannot be understood.’⁶

The collapse of Batista’s regime posed the question of what, if anything, the Revolution would do to tackle these economic and structural problems. Different forces and sectors within Cuba, not least within the new leadership and power structure, had different answers. The conflicts and contradictions which emerged in responding to this challenge in the years 1959 to 1961 propelled the consolidation of the Revolution and the emergence of the BFS. The first government formed by the Revolution was made up of moderate or liberal bourgeois elements of the opposition to Batista. This pacified and confused US officials, foreign investors and domestic capitalists. However military and popular power lay with the Rebel Army and other organisations which had participated in the revolutionary struggle. This created an

⁵ IBRD. *Report of the Mission to Cuba, July 1951*. Washington DC: Office of the President, 1951 & US Department of Commerce. *Investment in Cuba: Basic Information for United States Businessmen*, Washington DC: GPO, 1956.

⁶ Boorstein, *Transformation*, 1.

initial awkward co-existence between 'business as usual' capitalism and the radicalisation of the Revolution. Ultimately it was unsustainable.

In May 1959 the Agrarian Reform Law and other radical legislation made the US government and capitalist interests abroad uncomfortable, including those who had allied with Castro and the Moncada Programme which had advocated such reforms. Capitalists froze investments and ran down inventories, either in 'wait and see' uncertainty, or to consciously create economic and political difficulties to undermine the new regime, which responded with nationalisations to prevent economic sabotage. Society polarised, many liberal representatives of the government disowned it, some joining force with growing US-based opposition. Meanwhile the Revolution consolidated to the left, passing ever more radical legislation.

When advisors to the new government and planning agencies from the United Nations Economic Commission of Latin America (ECLA) were withdrawn from Cuba under US pressure, they were replaced with advisors and technicians from the socialist countries.⁷ The nationalisations brought most production in Cuba under state control and ECLA advisors, mostly advocates of the Import Substitution Industrialisation model, had reached the limits of their knowledge which was reformist capitalist. They had no experience of socialist planning. Cuba became integrated into the socialist countries' economies and, more gradually, the socialist political bloc. The US imposed a trade blockade, leading to severe shortages in Cuba, and pressured its western allies to follow suit and refuse financial credits while Latin American countries began to break off diplomatic relations.⁸ Rationing was introduced in March 1961. In April, Cuban émigrés trained and financed by US authorities invaded the island at the Bay of Pigs, being defeated and captured within days. It was the third and most substantial invasion of Cuba's coast by exiles.

⁷ Juan Noyola, head of the ECLA mission, ignored the order to withdraw and remained in Cuba with some ECLA colleagues.

⁸ See Jane Priestland (researcher), *British Archives on the Cuban Missile Crisis 1962*. London: Archival Publications International, 2001.

As a result of developments in this period, within two years Cuba was transformed from a 'free enterprise' economy dominated by US investment and trade to a country in which around 84% of Cuban industry had been placed under state control and trade had almost entirely shifted to the socialist countries. Guevara was instrumental to the policies, projects and reactions which propelled this transformation.

MILITARY CONSOLIDATION

Following his bitter experience in Guatemala, where democratically elected president Jacob Arbenz was overthrown by a CIA-sponsored military coup, Guevara was committed to purging the existing army in the formation of a new regime. From January 1959 at La Cabaña fortress he presided over the trials and executions of members of Batista's army and police proven complicit in brutal repression. Supported by most Cubans and applauded in *Bohemia* magazine, the events created uproar outside Cuba and gave Guevara a reputation for 'red terror'.⁹ According to biographer Jon Lee Anderson, Guevara was simultaneously involved in setting up the new state security apparatus and the Liberation Department in the Intelligence Section to assist overseas guerrilla movements.¹⁰ The ascendancy of the Rebel Army as the armed body of the state and the formation of an intelligence service to keep the leadership informed about machinations against the Revolution meant that the deliberations of the official government in Havana took the form of 'sound and fury' as real power and popular support lay with the left wing of the revolutionary movement.

By early 1960, operative defence teams were formed in preparation for US or mercenary attacks. Guevara was responsible for Pinar del Rio province in the west of

⁹ Miguel Ángel Duque de Estrada Ramos, the lawyer who presided over the Commission for Purges, showed me the list of names, charges, verdicts and sentences of the trials between January and June 1959: 560 military trials with 54 individuals sentenced to death. On 9 June 1959, military tribunals were transferred to civilian courts. In October 1959 a new crime was introduced for 'counter-revolutionary acts' including sabotage and terrorism. Interview, 23 February 2005. Indicative of the prevailing dramatisation of the purge, Jon Lee Anderson cites 550 executions (not trials) in La Cabaña from January-April 1959. *Che Guevara: A Revolutionary Life*, New York: Grove Press, 1997, 419.

¹⁰ Anderson, *Che*, 385 & 395.

the island.¹¹ Cuba entered a state of national defence mobilisation, with civilians organised into militias throughout the island. Guevara promoted arming civilians and participated in a campaign to provide political education to accompany that military training. He was also responsible for institutionalising strict discipline. As head of Department of Training of the Revolutionary Armed Forces (FAR) from late January 1959, Guevara was involved with Cayo Lago, a hard labour camp for Rebel Army soldiers guilty of indiscipline or petty crimes.¹² This discipline was part of Guevara's insistence on the role of the guerrilla fighter as social reformer and, more generally, his concepts about social responsibility and work as a social duty under socialism.

POLITICAL CONSOLIDATION

Guevara was determined to provide basic literacy, political and cultural education to the troops in La Cabaña before they returned to their towns and villages. He urged them to contribute to the consolidation of the new regime. In La Cabaña he inaugurated the Military-Cultural Academy, which gave classes in civics, history, geography, economics, Latin American states and current affairs. He gave political orientation classes to his own officers, including a basic history of socialism. In late January 1959, Guevara became head of the Department of Training of FAR. He founded a newspaper called *La Cabaña Libre* and contributed to *Verde Olivo* of the FAR. In his work on the Cuban Rebel Army, Fred Judson said: 'On the theoretical and polemical plan, *Verde Olivo* relied mostly on Guevara and Castro to explain imperialism and Cuban economic dependence. Guevara's articles, especially, were explanations of imperialism from a Leninist perspective.'¹³ His articles recording episodes of the war were published as *Reminiscences of a Revolutionary War*. The following year he published *Guerrilla Warfare*, a guidebook to the *foco* theory. In 1959 he set up Prensa Latina, a regional press agency to rival US corporate media

¹¹ Omar Fernández Cañizares, interview, 2 March 2006. Fernández was in the team which Guevara oversaw.

¹² Details in Chapter 10.

¹³ C Fred Judson, *Cuba and the Revolutionary Myth: The Political Education of the Cuban Rebel Army, 1953-1963*, Colorado: Westview, 1984, 249.

domination, with Argentinian Ricardo Masetti and Uruguayan Carlos Maria Gutiérrez, commissioning journalists from around the world.¹⁴

In the first days of January 1959 Guevara organised meetings of all the student and youth groups involved in the struggle against Batista: the Socialist Youth (youth wing of the Popular Socialist Party, or PSP); the Revolutionary Directorate (DR); the University Students Federation (FEU); and his own 26 July Movement (M26J). On 28 January 1959 they became the Association of Rebel Youth, setting up municipal, provincial and national committees in all workplaces. In 1962 this became the Union of Young Communists, with the daily newspaper *Juventud Rebelde*. Guevara also contributed to the process of university reform.¹⁵

In talks with the PSP and DR about power sharing, Guevara was among those who lay the groundwork for the Integration of Revolutionary Organisations (ORI). These talks were secret because of the prevailing anti-communism, the increasing incorporation of PSP members in the new structures of government providing the pretext for liberal members of the M26J to split with the revolutionary process. The name ORI began as a descriptive reference, but became an institution by July 1961.¹⁶ A national directorate was announced in March 1962 with 25 members from across the three groups, including Guevara. He was instrumental in tightening relations with the communists, and through them with the Soviet Union. His deputy Orlando Borrego said: 'Che had total confidence in the members of the PSP. He had a Marxist formation and he considered the members of the PSP to be most trustworthy. When it was necessary to name an administrator of a nationalised factory, he would try to find one from among the militants of the Communist Party, because he believed they were more reliable.'¹⁷ Guevara's attitude changed following the sectarian machinations of PSP leading member Anibal Escalante, ORI's secretary, and as his critique of the Soviet bloc developed.¹⁸

¹⁴ Anderson, *Che*, 385 & 408.

¹⁵ Luis Gálvez, interview, 9 February 2006.

¹⁶ Hugh Thomas, *Cuba: Or the Pursuit of Freedom*, London: Eyre and Spottiswoode, 1971, 1372 & K S Karol, *Guerrillas in Power*, trans. Arnold Pomerans. London: Jonathon Cape, 1971, 234.

¹⁷ Borrego, interview, 24 January 2005.

¹⁸ Guevara's response to the problems of sectarianism is not detailed in this thesis.

ECONOMIC TRANSFORMATION

Guevara's concern for production began in the Sierra Maestra where he set up artisan workshops and other projects to sustain the Rebel Army: a bakery, a cobblers, farms, a newspaper, radio station and 'home made' bomb factories. Self-sufficiency meant it was unnecessary to take from the locals, and land reform carried out in Rebel Army controlled 'free territory' gave the rural poor land.¹⁹ In October 1958 on arrival with his troops in the mountains in central Cuba, Guevara asked the PSP to send him books about the Cuban economy, arguably demonstrating that he was concerned with economic transformation even before the collapse of Batista's regime.²⁰ In La Cabaña, Guevara again set up small scale and artisan industry to employ troops. From 5 of January 1959, Guevara began collaborating with Alfredo Menéndez, Juan Borroto, Omelio Sánchez and Francisco Yero, clandestine members of the M26J who worked in the Cuban Sugar Institute (ICA), representing landowners and the big sugar owners.²¹ Borroto recalled: 'We explained to Che about the sugar industry and the sugar *diferencial*, which was a conquest won by Jesús Menéndez [militant leader of the sugar workers] to ensure that the sugar workers would share in the sugar profits. Che was particularly interested by this.'²² Menéndez said: 'Che said very early on that we had to create jobs because the Revolution could not stay in power for long without resolving the problem of unemployment in Cuba.'²³ By summer 1959, almost two years before Castro's declaration of socialism, Guevara told the ICA group that the Revolution was constructing socialism in Cuba.²⁴

Land reform was central to the revolutionaries' conceptions about political and economic independence, and social justice and it was considered a precondition for industrialisation. Throughout March and April 1959, Guevara was involved in secret talks with the PSP and DR to prepare the Agrarian Reform Law which was

¹⁹ For details see Valdés, *Reforma*.

²⁰ PSP member Alfredo Menéndez sent his own books for Guevara. Interview, 11 February 2005.

²¹ Juan Borroto, interview, 26 January 2006. This work was secret and they continued in the ICA.

²² Borroto, interview.

²³ Menéndez, interview, 17 February 2005.

²⁴ Borroto, interview & Menéndez, interview, 11 February.

promulgated on 17 May and enacted on 8 June. The law was moderate, confiscating unproductive plantations of over 1,000 acres, affecting just 12,500 properties, or 10% of Cuban farms that size.²⁵ It echoed article one of the 1940 Constitution. Right wing newspaper *Diario de la Marina* applauded it as a very 'responsible' agrarian reform. Guevara referred to 'our first timid law, which did not dare take on so basic a task as suppressing the plantation owners'.²⁶ Nonetheless, as Antoni Kapcia explained: 'The law's radicalism lay in the fact of state intervention and the steady shift towards cooperativization and then collectivisation, all directly affecting American-owned property'.²⁷ The 'timid law' confirmed progress towards the revolutionary laws originally outlined in Castro's Moncada Programme of 1953. Boorstein wrote: 'Cuba needed land reform. But a true land reform is not a technical measure that can be accomplished to the satisfaction of everybody...A true land reform hurts; it changes the balance of political power; it begins a process of broader change. A true land reform is not a *reform*; it is a *revolutionary* measure.'²⁸ Menéndez worked with Castro on a commission set up to negotiate with domestic land owners and sugar industrialists. 'Fidel told me not to fight with them until next year because first we will take the land from the Americans' he said, affirming that 'Fidel knew that the North American imperialism will react immediately after the Law.'²⁹

Nationalised land was to be distributed among landless rural workers or turned into cooperative farms to be administered by a new organisation, the National Institute of Agrarian Reform (INRA). With Castro as President, and the Revolution rooted in rural support, INRA became the key institution driving the radicalisation of the regime and the principle power-base for left-wing leaders. Boorstein wrote:

'You could see and feel in the halls and offices of the INRA headquarters in Havana that it was a revolutionary organization. Here were not the

²⁵ Thomas, *Cuba & Valdés, Reforma*.

²⁶ Both cited by Paco Ignacio Taibo II, *Guevara: also known as Che*, trans. Martín Roberts. New York: St Martín's Griffin, 1997, 277.

²⁷ Antoni Kapcia, *Island of Dreams*. Oxford: Berg, 2000, 114.

²⁸ Boorstein, *Transformation*, 15. Author's emphasis.

²⁹ Menéndez, interview, 17 February. In August 1963, the second Agrarian Reform Law was much further reaching.

prim, old-line functionaries of the National Bank or Treasury, but bearded rebels in uniform, carrying arms. The working hours were not the 9-5 of the ordinary government worker. They were the irregular hours – the nocturnal hours – of the guerrilla fighter. Meetings could start at midnight and last till daybreak. INRA was characterised by suspicion of and contempt for bureaucracy and paperwork.³⁰

The group from ICA, Menéndez, Sánchez, Idearte and Borroto, worked on the structure of this huge institution and later they were incorporated into the Department of Industrialisation, going on to lead key areas of work in MININD from February 1961. After producing a report on the feasibility of selling sugar to countries outside the west and socialist bloc, Menéndez accompanied Guevara on the new government's first overseas trip, 'a goodwill mission' to 11 countries: Egypt, Syria, India, Burma, Japan, Indonesia, Ceylon, Pakistan, Yugoslavia, Sudan and Morocco. The mission, to be headed by Guevara, was announced by Castro in April 1959, just hours after inaugurating an exhibition of Cuban products organised by Omar Fernández Cañizares. Fernández fell off his chair with surprise as he found out from the televised announcement that he was to be Che's deputy on the trip.³¹ The objective was to initiate and extend commercial and political relations and request support for the Revolution: an early measure to decrease Cuba's trade dependency on the US in anticipation of future confrontation. The mission was pivotal for Guevara. Between 12 June and 6 September, the delegation observed numerous industries which Guevara later attempted to foster under MININD: iron and steel, ship-building, textiles, hydroelectrics, generators, turbines, machinery construction, paper mills and so on. Fernández recalled:

'During the trip, Che focussed on the factories, no matter how small they were. In India we saw a motor factory and he said: "There are components from other countries, but we could make these motors in Cuba." In Egypt we saw the development of the iron and steel industry.

³⁰ Boorstein, *Transformation*, 48.

³¹ Fernández *Un Viaje Histórico con el Che*, La Habana: Ciencias Sociales, 2005 & interview.

He said it meant that they would be self-sufficient in metals: “We could develop the iron and steel industry in Cuba in eight or ten years.” He considered everything we saw, like the enterprise for machine construction. From the beginning of MININD he tried to develop an industry of machine construction.’³²

Guevara was also interested in agrarian reform laws in Egypt, Yugoslavia, Japan and the United Arab Republic and expressed a desire to copy the research and science institutes of some countries, particularly the physics, medical, chemical and agricultural institutes in Egypt and India, and the statistics institute in the latter.³³

Arguably the most significant visit was to Yugoslavia; a socialist country which had split with the Soviet bloc and was involved in the foundation of the Non-Aligned Movement. This was Guevara’s first experience of a country using the Soviet-style economic management system known as economic calculus or auto-financing system (AFS). The Cuban mission witnessed workers’ management of factories and voluntary labour, as well as advances in industrialisation. Fernández recalled that the Yugoslavs:

‘... explained government policy to us, how they directed the economy, the workers’ earnings, how they helped the administrators, their social programmes, their ideas and the type of socialism which they were trying to construct. The Yugoslavs said that their social problems were identical to those in the USSR but that their socialism was different from that of the Russians.’³⁴

Arguably, observing a ‘socialist’ country which had broken away from Soviet orthodoxy and enjoyed significant industrial development contributed towards Guevara’s confidence in critically analysing the Soviet economic management

³² Fernández, interview.

³³ Guevara, ‘Conferencia de prensa al regreso del viaje’ & ‘Comparencia en el programa “Comentarios Economicos”’, in Fernández, *Viaje*, 167-184 & 185-193.

³⁴ Fernández, interview.

system and resisting blanket copying for Cuba. However he never regarded Yugoslavia as an alternative model for Cuba.

Indeed, Guevara's opinion of Yugoslavia appears contradictory. This reflects both the tension between public voice and private views, before the Revolution was declared to be socialist, and the immaturity of his ideas on socialist political economy. Fernández said Guevara: 'drew our attention to the fact that Yugoslavia, a socialist country, had acquired great development... but he did not speak about Cuba being socialist.'³⁵ Back in Cuba Guevara applauded the level of development, the freedom of discussion in Yugoslavia, and said: 'we had many discussions there about diverse problems, about the organisation of work in Yugoslavia, based on what they call 'self-financing', a system in which they give the workers a great responsibility in all factories... The system is a little complicated and difficult to understand, but very interesting.'³⁶ A week later he said Yugoslavia had a 'Marxist economy' and had advanced without help from the Soviet bloc.³⁷ However, in a third report, Guevara described Yugoslavia as 'managerial capitalism with a socialist distribution of the profits' and pointed to the potential for competition among enterprises to distort the socialist spirit.³⁸ Cuban economist Carlos Tablada pointed out that: 'in his first contact with an economy governed by the so-called self-management system, without direct knowledge of the other socialist countries or of specialised economic literature, and without yet having a post in government that compelled him to look into these questions – Che was already concerned about the self-management system'.³⁹ This process of analysis of political economy was the first step towards his later contributions to the Great Debate 1963-5 and his critique of the Soviet Manual of Political Economy.

³⁵ Fernández, interview.

³⁶ Guevara, *Conferencia*, 171-2.

³⁷ Guevara, *Comparencia*, 185.

³⁸ Guevara, 'Yugoslavia, en pueblo que lucha por sus ideas', *Verde Olivo*, 26 November 1959.

<http://cheguevara.cubasi.cu>

³⁹ Carlos Tablada *Che Guevara: Economics and Politics in the Transition to Socialism*, New York: Pathfinder, 1990, 112.

Cuba established full diplomatic relations in every country visited and various preliminary trade agreements were made. In Egypt they began secret negotiations with Soviet representatives. Menéndez revealed: 'I returned from the trip to see Fidel to receive more instructions and tell him about the conversations with the USSR.'⁴⁰ Three weeks after the mission returned, on 7 October Guevara was named as head of the Department of Industrialisation within INRA. Fernández was not surprised: 'After the trip, Che had become a true industrialist, a defender of industry and Fidel rewarded him. He spoke a lot about what the country could produce on the base of industry.'⁴¹ In August 1960 Guevara opposed recommendations by the French agronomist René Dumont who urged the Cuban government to adopt market-orientated measures based on material incentives, the restoration of profit and a market pricing system as the main regulators of production and consumer goods allocation: another example of his deepening opposition to 'market socialism' and this still six months before the socialist character of the Revolution was declared in April 1961.⁴² Guevara was also on the Economic Commission of the National Directorate of ORI, the highest level organisation determining the Revolution's development strategy, and the Commission's representative on the Central Planning Board (JUCEPLAN) which concretised and institutionalised that strategy and the transition to a planned economy. In addition, he also became president of the National Bank.

⁴⁰ Menéndez, interview, 11 February. The need for secrecy reflected Cold War tensions, more than the significance of trade negotiations. Even under Batista's regime, Cuba had sold sugar annually to the USSR.

⁴¹ Fernández, interview.

⁴² Robert M Bernardo, *The Theory of Moral Incentives*, University of Alabama Press, 1971, 16. Bernardo recorded that Dumont was invited to Cuba by Fidel Castro to discuss his reports critical of the Revolution's achievements. Despite criticising the new 'peoples' farms' Dumont was invited to Cuba in 1963 by Carlos Rafael Rodríguez, INRA President, to carry out further investigations. In 1964, he published *Cuba, Socialisme et Développement*, with further criticisms and was invited again by Castro in summer 1969. Despite Castro and Rodríguez's engagement in Dumont's critical analysis of Cuban agricultural organisation, Borrego, said that: 'although Che did not leave anything written referring to Dumont, I can assure you that he regarded him as an enemy.' (Email correspondence 6 July 2007.)

THE NATIONAL BANK OF CUBA

Cuban President Osvaldo Dorticós' joke about how Guevara volunteered to preside over the National Bank of Cuba (NBC) is better known than any details of his work in that position. The story goes that in a frantic late-night meeting of the Council of Ministers in the midst of the tit-for-tat retaliations between Cuba and the United States and the defection of the bourgeois liberals from Cuba, Castro asked for 'a good economist' to take over presidency of the NBC. Half asleep, Guevara raised his hand, Castro replied with surprise: 'Che, I didn't know you were a good economist', to which Guevara exclaimed: 'Oh, I thought you asked for a good communist!' The story has become part of the legend of the man and the Revolution and indicates that, early on, Guevara was perceived as a revolutionary communist who would take on any task he was assigned too. Indeed, Guevara was wide awake to the fact that changing property relations and the break with the US government demanded profound adjustments in the role and character of financial institutions, particular as Cuba was preparing to implement socialist planning. The NBC was integral to problems of industrialisation, trade, and the sugar industry. Therefore, given his contribution to the agrarian reform law and having been placed at the head of industrialisation, it is not so surprising that Guevara presided over a revolutionary adjustment in the role of the banking system in Cuba.

Guevara began as President of the NBC on 26 November 1959, seven weeks after becoming head of the Department of Industrialisation in INRA. Prior to this, Guevara had not even been in the Council of Ministers and his rapid ascendancy to two first level roles in government reflected the radicalisation of the Revolution.⁴³ He was active as President for just 11 months, before leaving on a trade mission to the socialist countries in October 1960. Surrounding himself with professionals, Guevara introduced import-export licences, withdrew the country's gold supplies from the US, withdrew Cuba from international financial institutions dominated by the US, oversaw the establishment of a planning institution to direct trade with the

⁴³ Luis M Buch Rodríguez and Reinaldo Suárez Suárez. *Otros Pasos del Gobierno Revolucionario Cubano*. La Habana: Ciencias Sociales, 2002, 147.

Soviet bloc and the nationalisation of the banking system in Cuba, the first step to creating a state monopoly bank. In addition, one of his most important projects, the change of banknotes, took place in August 1961, almost a year after he left the bank, and it was another three years before he wrote a theoretical article about the role of the bank under socialism. The following section may take the form of narrative, but it should be remembered that a major contribution of this thesis has been in locating and recording details about this previously overlooked aspect of Guevara's work in Cuba.

The financial-banking situation at the start of 1959

The NBC had been set up in December 1948. It was relatively impotent in influencing the behaviour of private banks and investors in Cuba. The US government's *Investment in Cuba* report of July 1956 revealed that Cuban capital was averse to domestic investments, reluctant to buy Cuban government peso securities and invest in the stocks of domestic agricultural and industrial enterprises. The Cuban bourgeoisie's preference for liquidity: 'has been nurtured by the very nature of the Cuban economy, which places a high premium on the maintenance of liquid resources to meet the sudden and drastic swings inherent in a one-crop [sugar] economy' the report noted. Meanwhile: 'Cuban long-term investments in the United States amounted to at least \$150 million at the end of 1955.'⁴⁴ This made capital flight from Cuba easy and inevitable following the Revolution.

Before Batista's coup on 10 March 1952, Cuba's net or free monetary reserves were around \$534 million. Batista's regime reduced this by \$424 million, 79.4% to less than \$111 million. 70% of gross reserves were tied up in loan guarantees.⁴⁵ In sum, the Bank's net reserves did not reach the legally required minimum of 25% of its international liabilities in cash, gold or dollars; nor did they cover 75% of the gross gold or dollar reserves. Additionally, as Batista and his associates fled Cuba, they stole millions from the NBC and Treasury. Guevara's colleague, student leader Jorge

⁴⁴ US Department of Commerce, *Investment*, 14-15.

⁴⁵ Information mainly from Julio César Mascarós, *Historia de la banca en Cuba: 1492-2000*, La Habana: Ciencias Sociales, 2004, 109-121. One peso was officially equal to one dollar.

Ruiz Ferrer, explained: 'When we took power, Batista had taken everything, all the money; the country's reserves. We didn't have capital, it was a country de-capitalised; the national funds had been stolen!'⁴⁶ The new government had only national savings and tax revenue to draw on for investments, severely limiting public expenditure and private investment.

Public debt was a massive 1.24 billion peso on 31 December 1958: 788 million held directly by the state and 450 million in issues by public institutions guaranteed by the state, although largely for private investment. Most of this debt was accumulated during Batista's reign, up from 177 million peso in 1952, demonstrating the level of credit expansion in this period. Partly this reflects the corruption of dictatorship, which channelled state funds to private institutions set up by its collaborators. Foreign control of industry and commerce and the stagnation of the sugar sector meant that public office became the means to accumulation and social mobility by Cubans. 'Control of the state bureaucracy provided access to resources inaccessible elsewhere.'⁴⁷ Cuba's economic domination by foreign capital created a political infrastructure in which corruption and graft were structurally inherent.⁴⁸

Jiménez Velo joined the NBC in 1953 as the head of Inspection. Early in January 1959, he was sent to maintain control at the Bank of Economic and Social Development (BANDES). Set up in 1955, with the state as sole share holder, Jiménez claimed that: 'the main objective of the Bank, and this was its "development" part, was to favour the members of the dictatorship; they made themselves rich. Public credit was used to finance anonymous enterprises.'⁴⁹ Consequently a flurry of public works took place during the 1950s, and were inherited by the Revolution: the square and statue of José Martí (turned into Revolution Square); Havana Town Hall (now the Central Committee of the Communist Party of Cuba) the National Bank (now the Ameijeiras Mejeida

⁴⁶ Jorge Ruiz Ferrer, interview, 5 April 2006.

⁴⁷ Marifeli Perez-Stable, *The Cuban Revolution: Origins, Course and Legacy*, Oxford: Oxford University Press, 1999, 38.

⁴⁸ US investment controlled 90% of telephone and electric services, 50% of public railways and 40% of Cuban sugar production.

hospital), among others: ‘The Department of Work Concessions financed investments in infrastructure that generated incomes for the initial payment and interest on the bonds which were issued as a means of obtaining resources, for example toll roads, maritime terminals and other of a similar character’, explained Jiménez.⁵⁰

January 1959

Immediately after the Revolution, Felipe Pérez Pazos was named as President of the NBC; a politician and economist, he signed the *Manifiesto to the Cuban People* with Fidel Castro in the Sierra Maestra in July 1957. He immediately took measures to stop the withdrawal of funds by ex-functionaries and collaborators of the Batista regime and to prevent that money returning to Cuba to cause inflation, or fund counter-revolutionaries.⁵¹ To avoid devaluation of the peso, a system of control of international charges and payments was adopted, restricting the sale of hard currency for leisure trips, for remittances and the transfer of capital abroad.

In April 1959, 1,000 and 500 peso banknotes were withdrawn from circulation. In September 1959, another law criminalised currency speculation. This stopped *Batistiano* officials extracting money from the country. However, despite these controls, which aimed to avoid capital flight: ‘the directors of the National Bank did not apply them with the necessary severity in the first months of 1959’ according to

⁴⁹ Juan Raimundo Jiménez Velo, interview, 6 February 2006. Jiménez gave me details of BANDES projects to demonstrate this point.

⁵⁰ Jiménez, written submission, February 2006.

⁵¹ Commercial banks were ordered to stop payments of cheques when the amount suggested unusual movement of the account and access to vaults and security boxes was prohibited until new instructions were received. On the 28 January 1959, the Monetary Stabilisation Fund placed a 50 peso cash limit for all visitors, Cuban or foreign, entering the country.

Raúl Cepero Bonillo, the Revolution's first Minister of Trade.⁵² As a consequence on 26 November 1959, Guevara was named as President.

Ernesto 'Che' Guevara as President of the National Bank

*'Who are those that were worried when we designated Che as President of the National Bank? Surely it was not the guajiros (country folk), the sugar workers, nor the poor. Who was worried, who launched a little campaign against Che, who slandered Che, who distorted Che's ideas and turned Che into a phantom...and when we designated Che they had a big fright, those who were shocked by the phantom they had created... Che is not there to carry out any barbarity. Che is there the same as when we sent him to Las Villas [central Cuba] to stop the enemy troops passing towards Oriente [eastern Cuba], he is in the National Bank to stop hard currency leaving, and ensure the store of hard currency that we have is invested correctly.'*⁵³

Guevara's principal qualification was commitment to national independence, and to the increasingly socialist character of the revolutionary process; the rest was a case of learning on the job. His nomination reveals the severity of the crisis, and the speed of transition, where the impulse to radicalise the regime outstripped its technical capacity to facilitate that transformation. He was no more an economist than he had been a soldier or industrialist, although shortly after taking the job he wrote to his parents, perhaps ironically, of his 'apparently God-given gift for finance.'⁵⁴ This task

⁵² Raúl Cepero Bonilla, 'El Canje de Billetes: un Glope a la Contrarrevolución' in *Cuba Socialista*, Año 1, No. 2, Octubre 1961, La Habana, 43. Bonillo, who replaced Guevara as NBC president in February 1961, died in an airplane accident returning from a United Nations conference in Brazil in 1962. Meanwhile, Pazos left Cuba along with Justo Carrillo, Vice President of NBC and director of the Agricultural and Industrial Development Bank (BANFAI). In October 1960 Guevara revealed that: 'Felipe Pazos is in Puerto Rico occupying around fourth or fifth place in the leadership of the counter-revolution. Of course, the doctor Carrillo is also there and also has a place in the same "rating".' 'Intervención en el Ciclo de Conferencias del Banco Nacional', 20 October 1960, in *Escritos y Discursos*. Tomo 4, La Habana: Editorial de Ciencia Sociales, 1977, 215.

⁵³ Fidel Castro Ruz, at the sugar workers' plenary, December 1959, responding to uproar in the conservative press about Guevara's appointment as President of the NBC. Cited by Borrego, *Camino*, 14 to 15.

⁵⁴ Cited by Anderson, *Che*, 447.

and his leadership of industry provided experience of financial administration, later institutionalised in the BFS. Borrego, who was left in charge of the Department of Industrialisation, said that Guevara effectively continued to direct the work there as they met every night to discuss it.⁵⁵ In addition, he studied maths with Salvador Vileseca, the economist who accompanied him on the 'goodwill' mission. Learning maths and economics 'on the job' no doubt contributed to his ambitious projects around using applied mathematics for economic analysis and control.

Vilaseca, who had been active against the dictator Machado in the 1920s, recalled that Che asked him to work as Bank administrator: 'The administrator was the second in the Bank and I was scared... I had never been in a bank and I didn't possess an account. I said: "I don't know anything about banks." He replied "Me neither and I am the President, but when the Revolution assigns you to a post the only thing to do is to accept, get studying and work to perform as you should."' ⁵⁶ Apart from Vileseca, the only other *compañero* Guevara took to the bank was José Manressa, a former desk sergeant under Batista in La Cabaña who he had adopted as his own secretary. Guevara worked with the remaining NBC staff, those who hadn't joined the exodus of managers and professionals overseas. The banking trade union had been among the most radical in the struggle against Batista, but it represented the clerks and administrators, not economists and directors. It was different at the management level, as Jiménez testified: 'There was an enormous emigration. I had colleagues that invited me to go to Venezuela where I would be paid double. Most of the management personnel left. In Bank Inspections, for example, of 40 people 4 or 5 remained.' ⁵⁷

Dr Oscar Fernández Mel, who lived with Guevara in this period, said that Guevara was surrounded with experts learning from them and supervising, outlining the objectives and drawing his own conclusions: 'In practice he became an economist in the bank.' ⁵⁸ Ruiz said the bank functionaries accepted Guevara's presidency, because

⁵⁵ Borrego, interview, 15 March 2006.

⁵⁶ Salvador Vilaseca, unpublished interview with Tatiana Martínez Hernández, 1994 Havana. Vileseca died in 1996.

⁵⁷ Jiménez, interview.

⁵⁸ Oscar Fernández Mel, interview, 10 January 2006.

despite being capitalist bureaucrats, they appreciated that Guevara was methodical and organised: 'They were content with Che in that sense.'⁵⁹ Vilaseca recalled after calling the bank staff together to explain the concepts behind voluntary labour, the activity was kept up every Sunday: 'One of Che's characteristics which I discovered in the National Bank was that he knew how to form cadre. The staff had good technical formation but they were not really revolutionaries and he gave them that formation' said Vileseca.⁶⁰ Two months into his presidency, Guevara apologised, perhaps tongue-in-cheek, to his audience at the NBC: 'because my talk has been much more fiery than that which the post I occupy would make you suppose; I ask once more for forgiveness, but I am still much more of a *guerrilla* than President of the National Bank.'⁶¹ As if to prove it, he signed banknotes with his Cuban nom de guerre; *Che*.⁶²

According to John Gerassi:

'The first question he asked of his subordinates when he took over the bank was "Where has Cuba deposited its gold reserves and dollars?" When he was told, "In Fort Knox," he immediately decided to sell, converting the gold reserves into currencies which were exported to Canadian or Swiss banks. Thanks to his foresightedness, Cuba was not caught in a bind – indeed, it would have gone bankrupt – when the United States seized all Cuba's assets in the United States.'⁶³

One day after Guevara's designation a new resolution established a system of import licences and stopped the importation of many luxury goods. An International Department was made responsible for granting compulsory licences to import or export.

⁵⁹ Ruiz, interview.

⁶⁰ Vilaseca, interview.

⁶¹ Guevara, 'Discurso en el Banco Nacional' 29 January 1960, in *Guevara: Escritos*, Vol. 4, 67.

⁶² Buch, *Pasos*, 149.

⁶³ John Gerassi, (ed) 'Introduction' in *Venceremos! The speeches and writings of Che Guevara*, London: Panther, 1969, 41.

Guevara took decisive political measures to cut financial links with the US and international capitalist institutions, announcing Cuba's withdrawal from the International Monetary Fund, the World Bank and the Inter-American Development Bank. He ended a contract signed by Pazos for a US firm to report on BANDES' potential. Jiménez said: 'he did not consider it reliable to base any development policies on the criteria which came from them, more so when there were revolutionary Cuban professionals who are capable of carrying out these kind of tasks.'⁶⁴ BANDES was abolished in February 1960.

To counter the effects of economic warfare anticipated from the US, in April 1960 the Bank of Foreign Commerce (BANCEC) was set up, with Guevara as chair of the commission which oversaw it. Boorstein, who was advising BANCEC, explained that the predominant function of the bank was as a government foreign-trade agency:

'...in July (1960) BANCEC was instructed to import large quantities of goods as rapidly as possible, so as to reduce the impact of the embargo which the United States was expected to place on exports to Cuba.... The successful takeover and operation of the Cuban economy depended greatly on how well its foreign trade was managed under the rapidly changing conditions produced by the elimination of the US sugar quota, nationalization, the American embargo, and the need to reorient about 80 percent of Cuba's trade to the socialist countries... Quickly a rudimentary organisation was set up – Import and Export Divisions and a Financial Division to prepare the information required by the National Bank.'⁶⁵

The US blockade was indeed enforced from October 1960. Cuba's need for a state monopoly of trade was part of the broader structural changes underway, which inevitably involved the nationalisation of the bank. Bank historian Julio Cesar Mascaros wrote that: 'Of all the tasks the BNC had faced since its foundation none

⁶⁴ Jiménez, written submission. Jiménez adds that Guevara ensured that the US firm were duly paid according to the contract.

⁶⁵ Boorstein, *Transformation*, 31 and 64-5.

had such political connotations, or was as complicated and far-reaching as the nationalization of the bank.’⁶⁶ This was a direct response to the US government’s cutting of Cuba’s sugar quota.

On 3 July the US Congress authorised President Eisenhower to reduce Cuba’s sugar quota. Three days later, the Revolution’s Council of Ministers approved the forcible expropriation by the Cuban government of US industrial, banking and commercial operations. The law compensated expropriated owners with long-term government bonds in peso.⁶⁷ 14 hours later the US cut Cuba’s sugar quota by 700,000 tons. On 20 July the Soviet Union said it would buy the sugar dropped by the US. On 21 and 22 July, the Cuban government seized the three largest US sugar-mills. In the next two months tensions increased with retaliatory acts between the US and Cuba. On 17 September Cuba nationalised three US banks and their branches and dependencies in Cuba – The First National City Bank of New York, the First National Bank of Boston and the Chase Manhattan Bank – with total assets of 249 million peso, 149 million in loans, 207 million in deposits and capital or reserves of 12.5 million. The nationalisation resolution stated: ‘It is not possible that a considerable part of the National Bank should remain in the hands of imperialist interests that have led to the reduction of our sugar quota in a cowardly act and criminal economic aggression...’⁶⁸ Thus articulating the link between the role of the bank, the sugar industry and the struggle for national independence.⁶⁹

On 13 October 1960 all private banks in Cuba were nationalised with a resolution stating that the creation of money and the assigning of credit should belong exclusively to the state according to the requirements of economic planning and should not be entrusted to private enterprises that functioned under the profit

⁶⁶ Julio Cesar Mascaros, *Historia de la banca en Cuba (1492-2000)*, Editorial de Ciencias Sociales, La Habana, 2004, 113.

⁶⁷ The lack of financial reserves made cash compensation impossible. In addition, the government may have believed the bonds were an incentive to expropriated owners to urge the US government not to cut the sugar quota, which would inevitably annul the possibility of compensation.

⁶⁸ Cited by Mascaros, *Banca*, 114-5.

⁶⁹ Guillermo Jiménez *Las Empresas de Cuba 1958*, La Habana: Ciencias Sociales, 573-4 & 595-6, details these links, for example, between the Bank of Boston and the United Fruit Company, which owned two of the largest sugar mills in Cuba.

incentive, prioritising the interests of the individual, over the collective.⁷⁰ Three more foreign banks were nationalised, five public credit institutions and 44 domestic commercial banks.⁷¹ Just six out of the 55 (1.5%) of the banks in Cuba had been foreign, but they had held 32% of capital and reserves and 32.5% of cash, had 35% of total client deposits, 38% of loans and investments, 41% of bank loans and 31% of investments in state bonds and other public and private values, demonstrating the disproportionate domination by foreign banks of Cuban financial institutions.⁷² Six months prior to the declaration of socialism, the bank nationalisations turned the NBC into the sole bank in Cuba. Less than two years after the Revolution, Cuba had one state monopoly bank, which brought it institutionally closer to the Lenin's model of the socialist state bank than even the Soviet Union which still had several banks. Guevara asserted that nationalisation: 'effectively guarantees that the Agrarian Reform and the great aspirations to industrialise the country won't suffer from any sabotage or obstacles within the country.'⁷³ The NBC, he said, would be restructured along three lines: agricultural credit, industrial or commercial credit and a monopoly on imports and foreign trade.

The nationalisations of September and October 1960 transferred to the state 83.6% of industry, all sugar mills, 42.5% of land, most trade, the banks and the communications networks. On 23 February, at the same time that Guevara was named Minister of Industries, state control of all credits and finances was decreed. The NBC concentrated the functions of a central bank, investment bank, international operations bank and people's saving bank, increasing its capital to 100 million peso. Banking offices were built throughout the country to give the population access and encourage savings. Boorstein wrote that: 'The new organic law provided, not for the immediate, but for the "gradual and progressive introduction of the principles of planning credit and monetary circulations"...The new National Bank with its centralisation of monetary resources, its power of direct decision over credit, and its

⁷⁰ Mascaros, *Banca*, 115.

⁷¹ Foreign banks were: Royal Bank of Canada, The Bank of Nova Scotia and the Bank of China. Credit institutions were: BANFAI, National Finance Bank of Cuba, Cuban Bank of Foreign Trade (BANCEX), BANDES and the Assured Mortgages Fund.

⁷² Cited by Mascaros, *Banca*, 116-7.

⁷³ Guevara, *Intervención*, 216.

integration into a broader planning mechanism would give Cuba a powerful instrument of monetary planning and control.’⁷⁴ Later, during the Great Debate, Guevara challenged the concept of a socialist bank asserting financial control over production. This reflected both his experience of implementing administrative control in MININD, and the deepening of Marxist analysis from the study of *Capital*.

Changing the bank notes

‘Less than one year after the nationalization of the bank, the NBC faced an operation of such magnitude and importance in the economic-financial sphere it could be compared with the political-military defeat inflicted on the counter-revolution and imperialism at the Bay of Pigs.’⁷⁵

The change of banknotes was necessary to regain control of the money supply, stop capital flight and remove funding sources for the counter-revolution. Between December 1958 and August 1961, Cuba’s money supply had tripled according to NBC issues. However, prices rose only 6%, because up to 40% of the notes were being hoarded. In December 1958, monetary circulation was 451.2 million peso. More than that sum, 462.1 million, was not presented for exchange in August 1961, although officially money circulation should have been \$1,187 million. According to BNC’s then President, Cepero Bonilla, the order to print the new banknotes was given in August 1960, under Guevara’s presidency. Jiménez said that only Guevara, Castro, Dorticós and Vilaseca knew about the change; and that Cepero Bonilla was only informed when the project was ready.⁷⁶ Vilaseca said that Guevara ordered the printing of the banknotes while he was in Czechoslovakia. ‘This was a secret here for many years.’⁷⁷ Jiménez confirmed that: ‘Che ordered Vilaseca to make the money

⁷⁴ Boorstein, *Transformation*, 144-5.

⁷⁵ Mascaros, *Banca*, 119. In fact, during the Bay of Pigs invasion, the government took measures to combat US plans to create inflationary pressures. Thousands of Cuban workers in the US Naval Base in Guantanamo who were paid in dollars were suddenly permitted to exchange the dollars for five peso banknotes hoarded in US banks. 350,000 peso a month entered Cuban territory via these means alone until frontier controls were set up. From Cepero Bonilla, *Canje*, 46.

⁷⁶ Jiménez, interview.

⁷⁷ Vilaseca, interview.

and guard it in military zones. The people thought it was armaments.’⁷⁸ Jiménez also pointed out that all socialist countries had changed their bank notes and it was a process which was necessarily carried out in secret. It is possible to speculate that Guevara was advised to undertake this action whilst visiting the socialist countries. It was clearly vital to remove the money which the counter-revolution was using.

Cubans had the weekend of 4 to 8 August 1961 to exchange their cash for new banknotes. 3,500 exchange centres were set up, with ten operatives in each, having been given instructions just hours before the change began. Another 10,000 bank workers dealt with the technical aspects of the change and thousands of militia and FAR soldiers guarded the exchange centres, the banks and the trucks: ‘We calculate conservatively that more than 60,000 people were mobilized’ recorded Cepero Bonilla.⁷⁹ This operation was organised: ‘with perfect discretion and efficiency, so our enemies, from the sophisticated CIA to the last *gusano* (counter-revolutionary worm) would find out about the change through the press, and would not be able to take protective measures’ according to Mascaros.⁸⁰

Rosario Cueto, Borrego’s personal assistant in the Department of Industrialisation, was also summoned to join the operation: ‘We did not leave there for 72 hours’ she said, explaining how preparations were kept secret: ‘For example, Che got Herman López to do the drawings for the banknotes, but he didn’t know what they were for.’ These drawings still adorn Cuban peso notes today:

‘We worked on the withdrawal and organisation of the money. I had a list of people to call and things to guard. You did not know what they were, but you had to do it. Everything was very confidential, very compartmentalised. It gave us a level of discretion that was incredible considering how young we were. There are things which I still haven’t

⁷⁸ Velo, interview.

⁷⁹ Cepero Bonilla, *Canje*, 44.

⁸⁰ Mascaros, *Banca*, 119-120.

old my family. I said I didn't want anyone to tell me anything which I didn't need to know.'⁸¹

The decree was overt in its aim to: 'end the insecurity and risks which result from the fact that the banknotes currently in circulation are printed by foreign enterprises outside the effective control of the revolutionary government...[and] to prevent national monetary resources in the possession of the external counterrevolution from being used to conspire against the revolutionary government and the people of Cuba'⁸² Up to 200 peso for each nuclear family was changed immediately, while sums surplus to that were deposited in a special account, to be changed and withdrawn afterwards. Special Accounts were set up for institutions, enterprises, trade unions, political and social organisations and legal personnel, and there were special facilities for diplomats, tourists and foreign non-residents. No one could arrive or leave the island during the weekend, to prevent hoarders returning from abroad to change their banknotes. On the Monday, a new law limited private bank deposits. Up to 1,000 peso in deposit would be changed immediately; more than that was placed in Special Accounts receiving 3% interests. Up to 10,000 peso could be withdrawn in 100 peso monthly instalments. Sums in excess of 10,000 peso remained without changeable value. In other words this wealth was expropriated. This accumulated: 'enough to amortise the long term debt of the National Bank, that has decreased by 497 million peso', declared NBC's President Cepero Bonilla.⁸³ Changing the banknotes prevented capital flight, demonetised the counter-revolution's stolen funds and paid off the Bank's debt.

The bank and Guevara's Budgetary Finance System (BFS)

Aleida March, participant in the revolutionary struggle and Guevara's widow, said that Castro sent Guevara to the bank to prevent the exit of hard currency and to define the role of the bank. However, she emphasised two distinct periods in relation to Guevara and the bank: 'the first, when he was placed in the bank, without knowing

⁸¹ Rosario Cueto, interview in Havana, 20 March 2006.

⁸² Law 963, 4 August 1961, cited by Mascaros, *Banca*, 120.

⁸³ Cepero Bonilla, *Canje*, 52.

clearly what its role was in socialism; the second, when he had developed the lines of the Budgetary Finance System and analysed how the bank should function within this system. These are different stages.’⁸⁴ In contrast Jiménez claimed that: ‘Che used the bank to consolidate, in an operative form, the Budgetary Finance System that was based on the budgeting of expenditures and incomes... Che was developing his system consciously through the bank; the bank had to establish it.’⁸⁵ The truth is no doubt somewhere between these two interpretations, because the organisational structure of the BFS was established by Guevara in the Department of Industrialisation as a organisational apparatus to cope with concrete problems created by the nationalisation of industry, contemporaneously to his work as President of the NBC. However, this preliminary structure was gradually transformed into a unified system as Guevara deepened his theoretical conceptions about the transition to socialism. These are detailed in the following chapter.

Department of Industrialisation

‘With the exception of a few food products, lumber and textile industries, Cuba continues to be a producer of raw materials. Sugar is exported to import sweets, hides are exported to import shoes, iron is exported to import ploughs... Everyone agrees that the need to industrialise the country is urgent, that there is a lack of metallurgy industries; paper industries; chemical industries; that there is a need for breeding, crop cultivation, technological improvement and processing of our food industries so that they can resist the ruinous competition from European industries of cheese products, condensed milk, liquors and oils, and the north American canned goods; that we need merchant ships; that tourism could be an enormous source of revenue, but the owners of capital

⁸⁴ Aleida March, interview in Havana, 20 January 2005.

⁸⁵ Jiménez, interview.

I demand that the workers remain under the Claudian yoke; the state folds its arms and industrialisation can wait for the Greek calendar.’⁸⁶

Castro’s exposition on the state of domestic industry was hardly more radical than that reached by the IBRD which concluded there was a need:

‘1. To make Cuba less dependent on sugar by promoting additional activities...; 2. To expand existing – and to create new – industries producing sugar by-products and using sugar as a raw material...; 3. Vigorously promote non-sugar exports... the promotion of mineral exports and of the export of a variety of crude and processed foodstuffs; 4. To make further progress in producing in Cuba, for domestic consumption, a wide range of foodstuffs, raw materials and consumer goods now imported.’⁸⁷

On 7 October Guevara was announced as the head of a new institution to foster industrial development, one of a number of departments created within INRA. Orlando Borrego recounted that: ‘Che invited me to work with him. Che was to be the director and I was to be the vice-director. We had no idea of what needed to be done; we just knew we had to develop industry.’⁸⁸ Guevara’s secretary Manressa also joined him while Aleida March was his personal assistant. Guevara is reported to have said to Borrego: ‘Well, the first thing we have to do is finish the construction... Then I want you to take over the administration of the Department.’⁸⁹ Gradually other trusted revolutionaries were added to the Department staff: Francisco ‘Pancho’ García Vals, a PSP official; Calixto Morales from the Rebel Army; Ruiz and the

⁸⁶ Fidel Castro Ruz, *La Historia Me Absolverá*, Pedro Álvarez Tabío y Guillermo Alonso Fiel (ed), La Habana: Oficina de Publicaciones del Consejo de Estado, 2005, 47. ‘Under the Claudian yoke’ refers to the city of Claudius where in 32 BC the Samnite general Pontius Herennius made the defeated Roman army file past him bent double in humiliation.

⁸⁷ IBRD Report, 13.

⁸⁸ Borrego, Speech, International Youth Seminar, 23 November 2002. See also Borrego, *Camino*, 19.

⁸⁹ Cited by Anderson, *Che*, 438.

team from ICA who had worked on the Agrarian Reform law; Alfredo Menéndez, Juan Borroto, Omelio Sánchez and Juan Idearte.⁹⁰

Borrego recorded a peculiar situation because: 'the Department of Industrialisation had no industry under its management.'⁹¹ Its first acquisition was a small plastics factory with a mechanics workshop owned by Segismundo Pons, a tram driver and mechanic who had financed the PSP before the Revolution. Pons' factory was in financial difficulty in 1959 and he made contact with Guevara offering to sell it to the Department. A mixed private-state enterprise was agreed. Pons' head of sales, Mario Zorrilla, a PSP member, was invited by Borrego to manage the chemical industry enterprise there, which he did from March 1960.⁹² This mixed venture model was rejected shortly afterwards as events determined the type of ownership. The new industries passing into the Department's jurisdiction fell into three categories. Firstly, recovered industries, belonging to members of Batista's regime, those who left the country or had property confiscated by the courts for involvement in the dictatorship and passed to the Department by the Ministry of Embezzled Goods.⁹³ Secondly, intervened industries, factories or workshops where labour disputes had arisen because the owners had not paid salaries or production was interrupted for supply problems or lack of finances and which were passed to Industrialisation by the Ministry of Labour. Thirdly, nationalised industries, determined by the nationalisations laws, including those previously recovered or intervened.⁹⁴

The Department's second acquisition was a small tile factory employing 20 workers. The owner, a member of Batista's regime had fled to the US without paying the workers. The third factory was the old American Steel, which had been closed for

⁹⁰ Menéndez became the Director of the Consolidated Enterprise of Sugar in MININD, Borroto became the Director of Supervision, Sánchez was the Director of the Consolidated Enterprise of Minerals & the Institute of Cuban Mineral Resources.

⁹¹ Borrego, *Camino*, 15

⁹² Mario Zorrilla, interview, 27 March 2006.

⁹³ *Ministerio de Bienes Malversados*, translated by Thomas, *Cuba*, as Ministry of Stolen Property and by Anderson *Che*, as Recovery of Illegally Acquired Property, set up in January 1959 and headed by Faustino Pérez, a leader of urban M26J, in accordance with point five of the Moncada Programme, for property to be confiscated from ministers and politicians involved with Batista.

⁹⁴ Borrego, *Camino*, 15-16.

several years, laying off hundreds of employees. With just three factories, Borrego admitted: 'we already considered our organisation to be something important from the "productive" point of view.'⁹⁵ However the Department had no funds. A national campaign was underway to raise funds for INRA because the Treasury had been depleted. Ruiz had the idea of selling revolutionary Christmas cards to raise money: 'Che loved the idea; he got the best Cuban artists to design them for free and we printed and sold millions.'⁹⁶ Throughout Cuba people donated money or jewellery to build up the country's gold reserves. Borrego, Ruiz and other revolutionaries without dependants donated 50% of their salaries to INRA's funds. Individual contributions were institutionalised when western European banks, under pressure from the US, refused to grant credit to Cuba in March 1960. On 18 March, a new law put 4% of workers' salaries towards a fund for industrialisation. A week later another law took 10% from government ministers and the President to fund industrialisation.⁹⁷

Nationalisations and the search for new administrators

In March 1959, the new government 'intervened' in the US-owned Cuban branch of the International Telephone and Telegraphy company, officially to investigate irregularities in its operations. Effectively, it was the first nationalisation. The company, and the team of public accountants who carried out the intervention, were then incorporated into the Ministry of Embezzled Goods along with all other confiscated properties.⁹⁸ Nationalisations gathered apace. In July 1960 alone, the book value of the US industrial enterprises nationalised was \$800 million. In October 1960, there were two major nationalisation laws. On 14 October the Urban Reform Law went into effect nationalising all commercially owned real estate and all large industrial, commercial and transportation companies, including 20 with US owners. Around 200 small US companies remained in private hands. On 24 October, in direct response to the imposition of a partial US trade blockade, all remaining US property in Cuba was nationalised. The tit-for-tat retaliations between Cuba and the US are

⁹⁵ Borrego, *Camino*, 16.

⁹⁶ Ruiz, interview.

⁹⁷ Valdés, *Reforma*, 198.

⁹⁸ Joaquín Infante Ugarte, interview, 18 January 2005. Infante was a public accountant on the team which intervened in the telephone company.

well documented.⁹⁹ However, to capture the excitement, uncertainty and intensity of the period, and understand Guevara's contribution and response to this process, it is worth recording the anecdotes of those who lived through the experience at his side. Borrego recalled when Law 890 nationalised 200 foreign enterprises, including 80 sugar mills:

'Che called me at dawn straight after the law was passed and said we need to find 200 managers for those factories by tomorrow. I nearly had a heart attack! Where were we going to find them? I only knew about three people with any accountancy experience. Half an hour later Che called me again and said "Fidel has an idea, a solution." There was a boarding school with 200 youngsters aged between 15 and 20 years old, training to be voluntary teachers for the Sierra Maestra. Fidel said "we will make them the managers of the factories." I was shocked! A few minutes later Fidel called me and told me to go to the school even though it was the middle of the night to wake them. Fidel arrived at 4am. The students went mad with joy, throwing their things up to the ceiling. They were told they would be managers, they were very happy. I returned to the office to prepare the paper work so they could take an official letter to the factories. But we had a practical problem. There were no computers. All I had was a list of their names, ages and educational levels. I took a typewriter, wrote a template with a gap for the student's name and the factory name. I reproduced it with a stencil, and I had to make 200 copies in a couple of hours. The students arrived in the morning. At the same time, I was supposed to receive Jean-Paul Sartre and his wife Simone de Beauvoir, so I invited them to be witnesses to this process, the French philosopher at my side. Sartre's eyes were coming out of his head. I asked him what he thought of the process. "You are crazy!" he said "They are adolescents!"¹⁰⁰

⁹⁹ For a daily chronology see Jane Franklin *Cuba and the United States: A chronological history*, Melbourne: Ocean Press, 1997.

¹⁰⁰ Borrego, speech & *Camino*, 19.

Eugenio Basott, an M26J member, pointed out that the million Cubans who left in the first years of the Revolution were those who managed the country. It was difficult to find substitutes:

‘I took part in the management of 22 sugar mills and ten distilleries I didn’t know how to manage anything. When we nationalised the sugar industry, you know who we used to manage the sugar mills? Voluntary teachers between 15 and 20 years old. But at that moment in the sugar industry the working class was very strong and there were many old trade union workers so it was very easy for those young workers to manage the mills.’¹⁰¹

In other words, this was a feasible solution because the young cadre could count on the support of workers and the trade unions who accepted the authority invested in Borrego’s stencilled certificates. Many of these youngsters were replaced as MININD found appropriate substitutes and returned to their original teaching task. However, arguably the experience moulded Guevara’s approach to industrial organisation by providing important lessons: that commitment to the ever-radicalising Revolution was as important as technical experience in industrial leadership; the value of collaboration between the administrator and experienced workers; that no measures considered necessary to secure political and economic independence should be avoided for functional considerations. Such problems could be resolved *sobre la marcha* [on the move] with educational and political work and discipline.

Given Guevara’s commitment to socialism as a system, it can be assumed that he aspired to the nationalisation of industry from the outset. However, this assumption and hindsight should not de-historicise the dynamism and fluidity of the situation, the essentially reactive nature of the nationalisations. For example, Ruiz recalled how he inadvertently influenced the nationalisation of the steel industry. As the architect on the National Bank building project he was informed that the stock of belaying pins,

¹⁰¹ Eugenio Basott, interview, 9 December 2004.

vital in construction, would soon run out because the blockade had ended the raw material supply from the US. This would be disastrous; the Revolution had embarked on ambitious construction projects: homes for peasants and in urban slums, roads in rural areas, and recreational facilities for workers and so on.

‘We could see that within 50 or 60 days we would run out of belaying pins. I took the information on one page to Che in the National Bank. It was evening. Che was hurrying and said “don’t give me bits of paper now; I am going to the Council of Ministers”. I said “This is for the Council of Ministers” and he replied “Well then do give me bits of paper”. It read: “Commandante, here is the number of belaying pins that will be produced in Cuba and how many we need to consume. Greetings, Jorge.” And below that was a table showing the figures. The next morning my secretary threw me the newspaper. The headline said “Nationalised – the Steel and Iron Industry in Cuba!”’¹⁰²

A cross-class, anti-imperialist nationalist impulse drove the confrontation with foreign firms, particularly from the US, pitting wealthier Cubans together with workers in the struggle for independence via socialism. For example, Angel Arcos Bergnes was an auditor in the US Verientes Sugar Company earning US\$1,200 annually. Arcos worked undercover for the M26J and revealed his affinity with the Revolution when the mill was nationalised: ‘It was one of the most powerful, moving moments in my life’ he recalled. Shocked to see where his loyalties lay, his bosses offered to double to salary if he left Cuba for the US. He refused. ‘That day I committed class suicide, I ceased to represent the interests of the petit-bourgeoisie in order to continue with the revolutionary process.’¹⁰³

The Department searched frantically for administrators for the hundreds of new state owned production units. Ruiz recalled:

¹⁰² Ruiz, interview. Ruiz slept in the vault in the National Bank construction works.

¹⁰³ Ángel Arcos Bergnes, interview, 8 December 2004.

‘Every afternoon Borrego arrived with a list of all the factories and enterprises that had been nationalised. He would say “We need a head of production relating to metal balls – call so-and-so. An enterprise that produces things to do with optics in Matanzas – ring thingy, he’s designated as director. A sugar mill in such a place – who here is from that province? Send them there!” These were comrades from the Rebel Army, or a friend who you knew more or less. Borrego would say “Who do you have there, and what are they? An engineer! Send that one! And you know them? What kind of person is he? He’s clean, wasn’t with Batista?” It was just like that. We didn’t have any more time.’¹⁰⁴

Many of the new administrators had low educational levels and were suddenly in charge of complex production units, often with hundreds of workers. The ideal was to find people with accountancy training or administrative experience, but principally they had to be loyal to the Revolution and honest. Public accountancy could be studied in night classes before 1959, so there were working class accountants. However, basic accountancy was far short of the kind of managerial and technical experience necessary to run some of the technologically sophisticated modern industries in Cuba, particularly the subsidiaries of US firms. Cuba was assisted early on by advisors and technicians from Latin America, including ECLA, and from regional communist and other left-wing parties and, later, from the socialist bloc countries.

Grouping industries and centralising finances

The production units that came under the Department’s jurisdiction ranged from modern technology plants to artisan workshops. Financially, they ranged from profitable to bankrupt. Guevara devised two structures to deal with this problem, both of which proved to be elemental in the development of the BFS over the following years. Firstly, diverse production units were organised for administrative purposes into groups or sectors. In the Department these groupings were labelled

¹⁰⁴ Ruiz, interview.

Consolidados (Consolidates), but later in MININD they were *Empresas Consolidadas* (Consolidated Enterprises). Secondly, the finances of each unit were centralised, so all revenues were paid into a bank account from which each entity was allocated a budget.

For administrative purposes, it was decided that the state's new means of production should be grouped according to industrial sector, rather than territorially. Enrique Oltuski, a leading member of the urban M26J and the new government's first Minister of Communications, worked with Guevara on this organisational structure. He aimed to solve the problem of a lack of technicians by centralising the administration of industries to allow more efficient allocation of scarce specialists.¹⁰⁵ Ruiz recalled the process of discussion among the Department's founding members to work out details, such as the appropriate title for these groupings:

'We were discussing it with Borrego. Che wanted "trustifica", like the English word "trust". I said "we are consolidating." Che said "that's the word: *Consolidado!*" We united groups of industries. We didn't know anything about economics. We would spend the day studying when we had a big debate of this type. We had to go to the library or we sent for books and we spent an entire night arguing. It was very amusing; there would be one person here, two over there, everyone reading, and soon someone would exclaim "oh it's here, I've got it!" And another would reply "no, look what I've got here!" We would have a tremendous discussion all night. We didn't sleep but we carried on work during the day. When we had a problem we grappled with it until we knew how to resolve it. We found a solution and afterwards we continued reading and we went on improving. We weren't theoreticians. There were some theoreticians but there weren't many.'¹⁰⁶

This expresses the dialectical process behind the consolidation of the Revolution;

¹⁰⁵ Enrique Oltuski Osaka, *40 Aniversario de Industrias*. La Habana: Editora Política. 2001. 14.

¹⁰⁶ Ruiz, interview.

sobre la marcha, learning by doing, the dynamic between theory and practice, cause and effect, conflict and resolution. Guevara underwent this process with his Cuban colleagues and it fed into the formation of the BFS.

More serious was the problem of financing production and preventing production stoppages where factories did not have funds to pay salaries, acquire raw materials and so on. A single bank account was created for the Department in which all the factories would deposit their incomes, from the highly profitable enterprises: cigarettes, beer, soft drinks, petrol refineries, cosmetics and cleaning materials, to the hundreds of tiny workshops and small factories which were breaking even or bankrupt. This way the surpluses of the profitable enterprises could be allocated to broke ones, to ensure production continued so that the product was still available and unemployment avoided. Each enterprise prepared a budget, adding up its payroll and main expenditures for the year. This was the first step to the budgetary system of management; it was a concrete measure to ensure production continued throughout the industrial sector. The ideological aspect was gradually added as control was established and Guevara's theoretical understanding developed.¹⁰⁷

As President of the NBC, Guevara created the central fund, which was held in BANFAI until the bank nationalisations. Borroto was among those who visited the Department's new factories in the provinces to make a budget: 'My responsibility was the south coast of Santiago de Cuba.'¹⁰⁸ Budgets were duly estimated and allocated to the new production units and it was the administrators' responsibility to ensure the budget was applied as planned. Administrators could not receive credit from the bank, other enterprises, or from the Department itself. This financial discipline was a sharp learning curve for the young administrators. Harry Villegas, a squad leader in Guevara's Rebel Army column, and his bodyguard who lived with him throughout 1959, recalled his experience as intervening administrator in a mixed Cuban-Mexican enterprise called *Sanitarios Nacionales*, which sold insulators and tiles:

¹⁰⁷ Oltuski, *Aniversario*, 13-4.

¹⁰⁸ Borroto, interview.

‘I had read in a student’s thesis about the possibility of making homogenous glazed earthenware, so I tried to make it with Coca Cola bottles. I invested the whole budget to test the idea. Che told me that if it did not work I would have committed a technical misappropriation and would receive a strong sanction for deviating from the budget. I spent nights watching that little oven rotating full of coca cola bottles to see if they would arrive at the temperature necessary to obtain this glassed earthenware. Finally, I was saved! I ran to his house and waited for the morning to give him the good news.’¹⁰⁹

Young guerrilla fighters accustomed to the discipline of military life accepted the discipline of administrative responsibility because they understood that the battle to secure production and nationalise industry was part of the same revolutionary process as the battle against Batista.

Trade mission to the Soviet bloc

On 21 October 1960, Guevara left the island with the first Cuban delegation to the socialist countries to combat the effects of the blockade, partially introduced by the US government two days previously. The delegation went to the Soviet Union, Czechoslovakia, China and East Germany, before Guevara split off to visit North Korea and Héctor Rodríguez Llompart, then Vice Minister of Foreign Relations, led the rest of the delegation to Vietnam. After two months abroad, Guevara returned to Cuba leaving Llompart to continue on to Poland, Hungary, Bulgaria, Rumania and Albania.¹¹⁰ The list of imports required, exports for offer and expenditure available was prepared by BANCEC. Boorstein was involved in the preparations, which took two months, with the intention of making trade agreements covering the whole of the following year: ‘The data prepared for Major Guevara’s trade mission to the socialist

¹⁰⁹ Harry Villegas Tamayo, interview, 22 March 2006.

¹¹⁰ Héctor Rodríguez Llompart in Adys Cupull and Friolan Gonzalez (eds.), *Entre Nosotros*. La Habana: Ediciones Abril, 1992, 92.

countries in November and December of 1960 constituted, however imperfectly, a plan.¹¹¹

With the hindsight of Guevara's later criticisms of the Soviet bloc, it would be interesting to know his first impressions. Ariet García, scientific coordinator of the Che Guevara Study Centre in Havana, said Guevara had a neutral attitude when he first went to the socialist countries. 'He went with respect, not aware of problems.'¹¹² Aleida March went further: 'On Che's first visit to the socialist countries he thought they were almost perfect.'¹¹³ However, Borrego, who accompanied Guevara, said he already understood that there were problems with the political economy of the USSR, before travelling there in person. 'He developed his ideas from reading and talking to people. He read about the law of value being at the centre of the capitalist mode of production in Marx's *Capital* and then read the Soviet manuals talking about the use of the law of value. He also disagreed with the law of value operating in trade between socialist countries. He developed that idea by the end of 1960, and it was fully developed between 1961-2.'¹¹⁴ *Capital* reading seminars did not begin in MININD until September 1961, however Guevara had read a lot of Marxist literature before this and international Marxists like Paul Sweezy, Leo Huberman and Paul Baran had been in Cuba since 1959 expounding their own critiques of the Soviet system.¹¹⁵

Borrego lacked the theoretical base at that time to analyse the Soviet economic management system. However, he did observe: 'backwardness in administrative techniques, a low standard of living compared with Cuba's average, a contradiction between the level of development of science and technology in the arena of space, military technology and the scarce application of technology to production.'¹¹⁶ In

¹¹¹ Boorstein, *Transformation*, 140.

¹¹² Maria del Carmen Ariet García, interview, 20 January 2005.

¹¹³ Aleida March, interview, 20 January 2005.

¹¹⁴ Borrego, interview, 16 November.

¹¹⁵ Bernardo states that Guevara's views on the law of value in socialism were 'identical' to Sweezy's. *Theory*, 8.

¹¹⁶ Borrego, interview, 30 November 2005.

general he found the workers positive and enthusiastic about the system they had, hard working and very humble, although he noted a distance between the leadership and the rest of the population. The USSR was going through a period of reforms. Borrego said that instead of moral incentives, they talked about material incentives, profit and other capitalist categories, which Guevara began to criticise for creating a hybrid system. His analysis was evolving.

The results of the trip were tangible including four million tons of sugar sold at four centavos a pound, substantially higher than the world market price. Cuba received millions of peso worth of credit for purchasing capital and consumer goods. The Soviets would adapt petrol refineries, aid with prospecting for Cuban oil, help to develop the nickel mines and assist electrification of the country. On this return, Guevara announced that: 'More than 100 contracts have been signed to establish plants during the five-year period 1961-1965, and an equal number of plants are in discussion to be acquired in the course of those five years.'¹¹⁷ The means of production purchased from the socialist countries were added to those confiscated, recovered and nationalised, in the organisational and financial structure which constituted the shell of the BFS, operating in the jurisdiction of the Department of Industrialisation.

EMERGENCE OF THE BUDGETARY FINANCE SYSTEM

The BFS emerged as a practical measure to deal with a concrete problem. However, what began as a necessity was institutionalised and given the theoretical base to transform it into a comprehensive economic management system. Guevara, and those involved with his work in industries, claimed that the BFS was derived from the US monopolies. This does not mean it was identical to the monopoly system, but that it took key managerial precepts and adapted them to a planned economy in the process

¹¹⁷ Guevara, 'Informe de un Viaje a los Países Socialistas', in *Ernesto Che Guevara: Obras 1957-1967*, Tomo II, La Habana: Casa de Las Americas, 1970, 102.

of constructing socialism.¹¹⁸ It could appear contradictory, to base a management system for the socialist transition on capitalist structures; however, as Guevara himself deepened his Marxist analysis he realised the logic of this position. Marx had argued that communism would develop out of the fully developed capitalist mode of production. He also showed how the tendency to the concentration of capital, that is, to monopoly, was inherent in the system. Therefore, the monopoly form of capitalism is more developed than a 'perfect competition' or 'free market' stage of development. The Soviet system derived from early and underdeveloped capitalism, whereas the US and other foreign monopolies in Cuba, or their Cuban subsidiaries, were more technologically and administratively advanced, efficient and productive. A socialist economic management system which emerged out of monopoly capitalism would also be more advanced, efficient and productive.

It is not clear that this was Guevara's perception as early as 1959-1960. However, it was during this period that he began investigating the technological and administrative structures of the monopolies, noting their efficiency. Juan Valdés Gravalosa, a lawyer who joined the Department in October 1959 as a legal adviser and secretary of the Management Council, recalled Guevara analysing the accounting systems of the US companies as they fell into state hands with the nationalisations:

'I remember in the first days of the Department of Industrialisation one of the US enterprises nationalised was the Electric Company. The enterprises documents came to the Department. Che examined them himself and he noted that when there was a problem such as costs had gone up or productivity had gone down, immediately an accountant came from the US to analyse and take measures before returning to the US. This stirred his curiosity to understand how the economy of the monopolies functioned.'¹¹⁹

¹¹⁸ Details in chapter 7.

¹¹⁹ Valdés Gravalosa, interview.

Alfredo Menéndez's experience in the Cuban sugar industry, dominated by US monopolies meant he understood the BFS:

'I had applied the BFS in the sugar industry and with the banks under capitalism, so I explained it to Che. No bank lent money to any mill that was not part of its budget. Che asked himself how it was possible to manage sugar mills in Cuba from New York. Che began penetrating this system more and more. He said that the system was more advanced than that applied in the USSR, which was created in 1927 with elements of automation. He said that although the integrated budgetary system of accounts belonged to the multinationals, it could still be used. All the US subsidiaries that functioned in Cuba, the electrical industry, sugar, petroleum, used the budgetary system.'¹²⁰

In the 1950s, Oltuski had studied architecture in the US and specialised in the Organisation of Work Management with the intention of founding a construction company on return to Cuba. He also influenced the formation of Guevara's BFS:

'Organisationally, there is a lot of similarity in the management organisation in any system. There are activities which are common to all of them. You have to have a Department that controls personnel, an economist that controls the economic aspect of the enterprise; you have a technician, an administrator. I had mastered all of these things in my studies in the United States and I applied them in the structure of the enterprises we were creating... All of this was part of my technical formation. We discussed it, Che and me. We spoke about the common structures of both systems.'¹²¹

Unlike Oltuski and Menéndez, who worked with or studied capitalist enterprises, Guevara had no experience of management. In the process of creating this new

¹²⁰ Menéndez, interview, 17 February.

¹²¹ Oltuski, interview, 15 February 2006.

institution Guevara and his team had to study the present laws of the country and formulate new laws; formulate the enterprises' plan of production; decide how to subordinate the factories to the enterprise and determine relations between the enterprises and ministry, the ministry and the central government. Oltuski was involved in these processes: 'This work took us months. The ideas were taken to the Management Council for debate and approved or adjusted. Che generated many ideas, taking decisions as he went along.'¹²²

These testimonies demonstrate the dynamic and participatory process of formulating the new apparatus for the organisation of industry. The impact and influence of individual collaborators who worked with Guevara stand out, not just in relation to structures, but also in relation to management styles and methods of stimulating and engaging other workers and directors. Mario Zorrilla said that while Oltuski worked on the theory, he was contributing the practice through the daily experience of organisation.¹²³ As head of the Chemical *Consolidado*, Zorrilla established a procedure for reports to be written by all section heads under his jurisdiction.

'I asked the heads of production of each group of factories to submit a monthly report. In the beginning they were four or five people but I ended up with 11 heads of production as well as legal, economic and purchases departments. The first reports were six or seven typed pages, but they grew. I analysed them in a meeting in two parts: first with the heads of general departments, personnel, legal etc, and after with the heads of the factories... In this meeting everyone gave their opinion and handed in their reports. Then I met with all the heads and gave them a ranking: first, second, and so on. I sent all the reports to Borrego and Francisco Vals in the Department. This procedure was designed before the Ministry was created in February 1961. Che analysed it, spoke to my people and then he named me Vice Minister of the Economy when

¹²² Oltuski, interview.

¹²³ Zorrilla, interview.

MININD began. I went to see him and I complained that I was not an accountant or an economist. He said he knew even less!’¹²⁴

This procedure of all administrators and managers submitting regular written reports on the production units under their jurisdiction became integral to the BFS, part of the apparatus which promoted administrative control of production as an alternative to the economic control pursued in the Soviet management system, which relied on material incentives and other capitalist mechanisms to motivate directors and workers.¹²⁵

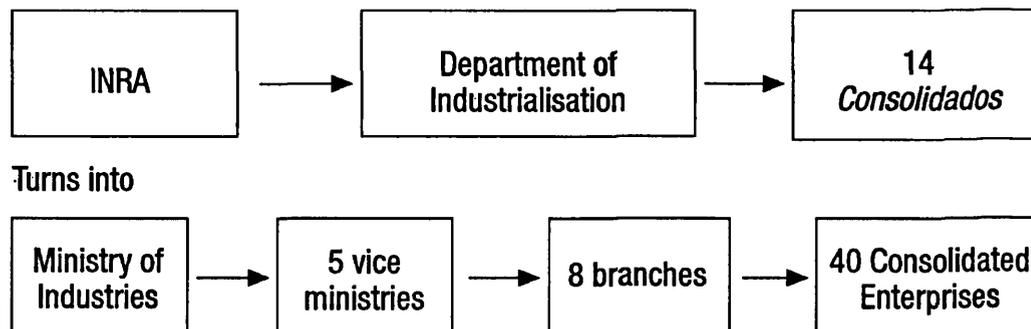
Zorrilla’s Chemical *Consolidado* which began with three factories in January 1960 mushroomed to 97 factories by the end of the year; the result of interventions, recuperations and nationalisations. The growth of the Department’s apparatus was repeated in all other sectors of industry, before adding the new means of production purchased from the socialist countries in late 1960. Within two years around 84% of Cuban industry had been placed under state control and the Department’s property included 161 sugar mills, three oil refineries, electric power and telephone plants, tobacco, metallurgical, textile, pharmaceutical, chemical and food factories.¹²⁶ This was a country which, unlike much of Latin America, had not previously had nationalised industries. It became clear that the Department’s possessions had outgrown it and a separate ministry was needed to drive the state’s industrialisation programme. The Department had begun with 14 *Consolidados*, by the time it was converted into the MININD in February 1961, there were eight branches of production and 40 Consolidated Enterprises. Several additional entities previously in INRA passed over the new MININD; the Petroleum Industry, the Cuban Mining Institute and the Department of General Sugar Centrals. Zorrilla’s chemical *consolidado* became 12 separate consolidated enterprises within MININD.

¹²⁴ Zorrilla, interview.

¹²⁵ Detailed in chapter 7.

¹²⁶ Boorstein, *Transformation*, 147.

From the Department of Industrialisation to the Ministry of Industries ¹²⁷



MININD's five vice ministers were in charge of: Basic Industry, Light Industry, Industrial Construction, Technical Development and the Economy. Later four branch heads were added to each of the first two vice ministries. Below these were the Consolidated Enterprises (ECs), which grouped production units of the relevant sector. The head of the EC was called a 'director' – the head a production unit was called an 'administrator'. The number of entities under each EC depended largely on the technological level of that sector. For example the EC of Petroleum controlled just three refineries while the EC of Flour grouped hundreds of small bakeries. By far the largest EC was Sugar, which accounted for 200,000 workers. This was under the vice minister of Basic Industry, before splitting off to form an independent ministry headed by Borrego in 1964. Throughout Guevara's period as minister, 1961-1965, MININD's structure continued to expand and transform, with increasing complexity and as decisions were made about the organisational structure, such as the level of decentralisation of various function. The official organisational structure appears as an appendix. By 1967 MININD had split into five separate ministries; Sugar, Foodstuffs, Light Industry, Electrics and Basic Industry.

¹²⁷ A detailed *chronograma* (organisational structure) of MININD appears as appendix one.

CONCLUSION

This overview of the first two years of the Revolution demonstrates Guevara's centrality in driving the structural changes which transformed Cuba from its underdeveloped semi-colonial status to political and economic independence and integration into the socialist bloc. By the end of this period, the revolutionary struggle against Batista had embarked on a socialist path. While Guevara did not take a prominent position in the first government, he was engaged in the formulation of vital policies which created the precondition for the radicalisation and consolidation of the Revolution. In the military sphere, and influenced by the experience of Guatemala, he led the purge of the ousted dictatorship, transforming the Rebel Army into the official armed body in defence of the new state. This meant that despite the pomp and ceremony of the new liberal government and the machinations of Washington, real power lay with the left wing of the revolutionary movement. He was also involved in the creation of an intelligence service which proved vital in protecting the lives of the radical leadership and keeping the state informed about machinations against the Revolution. This secret apparatus included support for overseas insurrections, which in the end, were Guevara's incentive for returning to South America.

Meanwhile, Guevara was also centrally involved in the formulation of the Agrarian Reform Law, whose radicalism lay not in its redistributive implications, but rather in its violation of the principle of private ownership and in its direct attack on US landowning interests in Cuba. Unlike in Guatemala, however, this land reform was backed up by the military force of the new regime. The Reform Law created INRA which, headed by Fidel Castro and other leaders of the M26J and PSP, served as the principal vehicle for the radicalisation of the Revolution. Guevara himself was prominent in INRA as head of the Department of Industrialisation. He also led the first overseas mission for the new state, to broaden Cuba's economic and political ties in anticipation of the break with the US. The trip influenced his emphasis on international cooperation between underdeveloped countries, particularly as a counter to imperialist penetration as well as providing him with insights to various

industrialisation and economic development strategies. His second trip to the socialist bloc heightened his awareness of contradictions within existing socialism, both internally and with the capitalist world in relation to the backwardness of productive forces and administrative techniques.

In late 1959, Guevara joined the government Council of Ministers, reflecting the radicalisation of the new state as liberal bourgeois forces left the Revolution to align with US imperialism. His nomination as President of the NBC signalled the destruction of pre-1959 institutional structures, which were to be reorganised to fit the political paradigm of socialist revolution. Guevara oversaw the nationalisation of the banks as President of the NBC, and the nationalisations of industry as head of the Department of Industrialisation. These measures created the institutional opening for Guevara to experiment in formulating his own structural solution to the challenges created by economic transformation; thus the shell of the BFS emerged. As his Marxist analysis deepened, along with the experience of management, the BFS gained more complex organisational and theoretical structures. Meanwhile, INRA and the Ministry of Foreign Trade adopted the auto-financing system (AFS) of management used in the Soviet bloc, signalling contradictions within the new and radicalised state. Commentator Bertram Silverman observed that: 'In 1963, when the argument reached the light of day, there existed in Cuba two systems of economic organization and ideology: one regulating agriculture and foreign trade, the other, industry. A confrontation was inevitable.'¹²⁸ This conflict is examined the next chapter of the thesis.

Throughout this period fundamental characteristics became ingrained in Guevara's *modus operandi*; learning by doing, working with experts regardless of their ideological affiliations, adopting the most advanced techniques regardless of their origins, permanent education and training, self-criticism and debate. These characteristics appear as recurring themes in Part 3 on Guevara's solution.

¹²⁸ Bertram Silverman, *Man and Socialism in Cuba: The Debate*. New York: Atheneum, 1971, 11.

CHAPTER 5

The Great Debate 1963–65

‘Che was a man of profound thought and Che had an exceptional opportunity during the first years of the Revolution to go deeply into important aspects of socialist construction...he confronted the task of applying the principles of Marxism-Leninism to the organisation of production, as he understood them, as he saw them. He worked at this for years, he spoke a lot, he wrote a lot about all those themes and really he developed a theory that was pretty elaborate and very profound about the way in which, in his view, socialism should be constructed to progress towards the communist society.’¹

INTRODUCTION

In January 1962 Guevara told colleagues in the Ministry of Industries (MININD): ‘In no way am I saying that financial autonomy of the enterprise with moral incentives, in the way it is established in the socialist countries, is going to be a formula which impedes progress to socialism’.² Less than three years later, in December 1964 he described a new management system being experimented with in the USSR as capitalist: ‘The only problem is when it is transferred from one factory to the whole of society, it will create anarchy of production, a crisis will come, and then socialism will have to return.’ There was not yet capitalism in the USSR, he added, but ‘the

¹ Fidel Castro, ‘Discurso Pronunciado por Fidel Castro el 8 de Octubre de 1987’ in David Deutschmann and Javier Salado (eds) *Gran Debate: Sobre la economía en Cuba 1963-1964*. La Habana: Ciencias Sociales, 2003, 402-3.

² Guevara, ‘Reunion Bimestrales’ 20 January 1962. *El Che en la Revolución Cubana: Ministerio de Industrias*, tomo VI. La Habana: Ministerio de Azúcar, 1966, 147.

theory is failing, because they have forgotten that Marx existed.³ In the period between these two statements, Guevara was involved in a debate on the political economy of the transition to socialism. He immersed himself in a study of Marx's *Capital*, other classic Marxist texts and modern literature, from east and west, both in favour of 'market socialism' and against Soviet use of capitalist mechanisms. This theoretical inquiry took place contemporaneously with the formulation of his alternative economic management system; the Budgetary Finance System (BFS).

The previous chapter outlined his formative experiences, including his engagement with the problems of economic transformation, during the first two years of the Revolution. This section is concerned with theory, not practice from 1962 to 1965; it focuses on Guevara's analysis, not the implementation of the BFS, which is detailed in the next part of the thesis. These two elements – the BFS and the interpretation of Marxism – are integrally linked. Theoretical opponents should be understood as defending different institutional systems. For clarity, the main differences in the proposals of the two systems are examined in Table 1 (overleaf).

The BFS was Guevara's project, developed within MININD, initially as a practical solution to concrete problems. In early 1962, MININD's Vice Minister of Light Industries, Omar Fernández Cañizares, left to become the new Minister of Transport. He claimed to have instituted the BFS at the Ministry of Transport (MINTRANS), organising the country's means of transport into consolidated enterprises.⁴ However, when Fernández left MININD the stage of development of the BFS was basic, so the system adapted from MININD was the shell of the comprehensive system operational by 1964. In June 1964, MININD's First Vice Minister Orlando Borrego left to set up a new Ministry of Sugar (MINAZ), also implementing the BFS. In MINAZ the BFS was applied with the benefit of the experience in MININD.⁵

³ Guevara, *Bimestrales*, 5 December 1964, 569.

⁴ Omar Fernández Castiñares, interview, 2 March 2006.

⁵ This thesis does not examine the BFS in MINAZ.

Table 1: Main differences in the organisational and theoretical structures of the Budgetary Finance System and the Auto-Financing System in Cuba

Budgetary Finance System	Auto-Financing System (also known as Economic Calculus)
<p>Enterprise: Factories and other production units grouped into <i>consolidated enterprises</i> according to industrial sector. Finances and administration centrally controlled.</p>	<p>Enterprise: Each production unit has its own juridical identity. Responsible for its own finances.</p>
<p>Money. Functions as unit of account, as reflection in prices of an enterprise's performance, to be analysed by central bodies. Enterprise does not have own funds, cannot loan or give credit.</p>	<p>Money. Functions as means of payment as well as unit of account. An indirect instrument of control, since funds permit the production unit to operate. Enterprise has own funds in bank and can get credit.</p>
<p>Banks. Hold separate account for withdrawals and for deposits of enterprises in accordance with the national production plan.</p>	<p>Banks. Relationship to enterprise similar to those of private producer and capitalist bank. Enterprises must explain plans and prove solvency, can take loans. Decisions are subject to national plan.</p>
<p>Incentives. Individual and collective material incentives are necessary concession, but limited by method of wage and bonus payment, not main lever to production. Compulsory professional training is precondition for</p>	<p>Incentives. Material self-interest is the main lever for increasing productivity, both collectively and individually developing the productive forces as a precondition for socialism and socialist consciousness. Material incentives</p>

promotion to higher wage categories. Moral incentives play progressively more important role and are incentive to developing socialist consciousness, via mechanisms like voluntary labour.

Law of value. Partially operative because remnants of commodity society still exist, but undermined by the plan (its antithesis) and new social relations. No commodity category in exchange between state enterprises. Cost cutting, not profit is key to evaluating enterprises.

Prices. All imported raw materials have fixed, stable price based on international market price. Cuban enterprise product prices made on basis of costs and not profit and must compare to international prices reflecting world productivity. Commodity prices set in relation to demand and supply and adjusted for basic needs.

applied through payment of bonuses for production over the norm and as reward to exceptional workers.

Law of value. Underdevelopment explains existence and *utility* of law of value in transition to socialism, to be considered in the plan. Commodity relations remain in exchange between enterprises. Profitability is the key to evaluating and stimulating production.

Prices. Claimed to be determined in relation to the law of value. Price to consumer is raised to level off supply of goods with effective demand.

National output and worker productivity declined in 1962/3 as the growth effect of the redistributive stage gave way to the shocks of profound structural change: new institutions, new social-relations of production, new trade relations, the exodus of professionals and the imposition of the US blockade. Inevitably Cuban economists and planners began contemplating which economic management system was appropriate for Cuba. This juncture coincided with increasing integration into the

socialist bloc via trade and human exchange; Cuban students went to Eastern Europe on scholarships while the bloc sent technicians and economists to Cuba. They advocated the Soviet economic management system, known in Cuba as the Auto-Financing System (AFS), or the Economic Calculus.⁶ Within Cuba, a challenge emerged to the BFS model of centralised administrative control and financing, arguing for it to be replaced by the AFS. Among the challengers were those committed to the Soviet road to socialism as members of the Popular Socialist Party (PSP). However, this was not a division along party lines.⁷ While Guevara's most prominent opponent was Carlos Rafael Rodríguez who was in the PSP leadership and President of the National Institute of Agrarian Reform (INRA), other opponents were members of the 26 July Movement (M26J); for example, Alberto Mora, Minister for Foreign Trade (MINCEX) and Marcelo Fernández Font, President of the National Bank.

The AFS was adopted in INRA and MINCEX. It meant financial decentralisation for enterprises which functioned as independent accounting units responsible for their own profits and losses and, in the case of INRA, was similar to the *khozraschet* model of cooperative farms in the USSR.⁸ On 23 August 1963, both the BFS and the AFS were institutionalised in law, although they had been in operation long before that. There were now competing economic management systems, operating under one central planning body (JUCEPLAN), one central bank and one treasury. This created the institutional conditions for what became known retrospectively as the Great Debate. All ministries received a budget allocated by JUCEPLAN, but the system implemented had practical implications concerning structures, policies, financial relations between state institutions, relations between producers and

⁶ The title of the system became a subject for dispute. This thesis uses the terms Auto-Financing System (AFS). In some quotes it is referred to as Economic Calculus, but it should be understood as the same thing.

⁷ As claimed by Cubanologists. See Carmelo Mesa-Lago, 'Ideological, Political and Economic Factors in the Cuban Controversy on Material Versus Moral Incentives'. *Journal of Interamerican Studies and World Affairs*, Vol 14: 1 (1972), 49-111.

⁸ Robert Bernardo identifies two separate groups among those rejecting Guevara's BFS: 'those who would expand the concept of *khozraschet* to include Libermanist methods of decentralizing the administrative system and those who would expand, to include market socialism. The latter often disguised their market orientation, but both camps were united in their relative lack of concern for ensuring the primacy of moral incentives.' *The Theory of Moral Incentives in Cuba*. Alabama: University of Alabama Press, 1971, 19.

consumers, and so on.⁹ However, because the proponents of the different systems sought vindication in Marxist literature, the discussion assumed the character of a theoretical, rather than a practical debate. It is important to appreciate that there was a discrepancy between theoretical conceptions about how the BFS and AFS should function, and the reality of their implementation. The theory was the conceptual paradigm which guided the practical policies, but the daily experience also fed back into the theoretical constructs.

The Great Debate occurred simultaneously with a broader debate within the socialist bloc as part of a rightward push to 'liberalise' the planned economy, introducing what was called market socialism. Yugoslavia, Czechoslovakia and Poland led this reformist drive in the 1950s and early 1960s. In 1962 Yevsei G Liberman, from the Institute of Industrial Economics in Kharkov, published an article in *Pravda* recommending that profitability become the determinant of production efficiency, pursued via material incentives. Lieberman's proposals, like those of many others, were a response to the problems of economic stagnation, low productivity and efficiency, particularly in comparison with the economic growth in the developed capitalist world. The protagonists in Cuba were well-informed about the broader debate on incentives and financial autonomy. In July 1964 Guevara told colleagues that he had been reading analyses from the socialist camp, including the resolutions of the 14th Congress of the Polish Communist Party: 'The solution that they are proposing for these problems in Poland is the complete freedom of the law of value; that is to say, a return to capitalism.'¹⁰ Historically, however, at that point it was not so evident that 'market socialism' was a step towards the restoration of the capitalist mode of production. In fact at the core of the debate was the shared objective of constructing socialist society in transition to communism.¹¹

⁹ JUCEPLAN plans were formulated according to the national development strategy which was formulated by the Economic Commission of government, constituted by Guevara (MININD), Rodríguez (INRA) and Osvaldo Dorticos (President of Cuba).

¹⁰ Guevara, *Bimestrales*, 11 July 1964, 505.

¹¹ Michael Buroway adapts Lakatos's model of a scientific research programme with a core theory that scientists protect against refutation by constructing auxiliary hypotheses to the study of the development of Marxism as a science. Applying this approach we can say that the participants in the Great Debate defend the core; the commitment to construct socialist society. Their dispute concerns the auxiliary hypothesis; that is, the means adopted to get there. 'Marxism as Science: Historical Challenges and Theoretical Growth', *American Sociological Review*, Vol 55: 6 (1990), 775-793.

Several participants in the Great Debate were in the Council of Ministers and had therefore studied *Capital* together with the Spanish-Russian political economy professor Anastasio Mansilla who was sent by the Soviets for this purpose.¹² At Guevara's invitation, in September 1961, Mansilla began *Capital* seminars in MININD for Guevara, his vice ministers, advisors and invited guests.¹³ The weekly Thursday seminars began at 9pm, often lasting until 5 or 6am. Every week Mansilla chose who would present the material, without prior warning. Participant Francisco Buron Seña admitted that: 'I attended because the analysis of Che confronting Mansilla was very illuminating, profound and educational.'¹⁴ Ángel Arcos Bergnes claimed that: 'Professor Mansilla was shocked by some of the criticisms from Che.'¹⁵ Borrego recalled an all night argument about the average rate of profit and the role of the law of value in socialism when at 4am, unable to win the argument, Mansilla threw up his hands in defeat and exclaimed that Guevara was right.¹⁶

This chapter does not present an exhaustive account of the Great Debate, but summarises Guevara's analysis which developed as a critique of other participants. It focuses on published articles, not speeches, meeting transcripts or other documents. The Debate has been variously interpreted as: an argument about the operation of the law of value under socialism;¹⁷ a disagreement about the use of moral incentives;¹⁸ a dispute over the level of financial (de)centralisation of enterprises;¹⁹ a conflict between the notion of *Cubanidad* and the New Man in a vision of utopia;²⁰ and a power struggle within the Cuban leadership.²¹ Furthermore, what actually constitutes

¹² Orlando Borrego Díaz, *Che, Recuerdos en Ráfaga*. La Habana: Editorial de Ciencias Sociales, 2004, 138.

¹³ The following information is from interviews with participants in the *Capital* reading seminar: Orlando Borrego, 16 November 2004 and 24 January 2005, Ángel Arcos Bergnes, 8 December 2004, Tirso Saenz, 7 January 2005, Enrique Oltuski, 12 January 2005, and Francisco Buron Sena, 22 February 2005.

¹⁴ Buron, interview. In March 1962 Buron left MININD where he had been Head of the Auditing Department to be Vice Minister of Domestic Trade. However, he was invited to continue participating in the *Capital* group.

¹⁵ Arcos, interview, 2004.

¹⁶ Borrego, *Recuerdos*, 138-40.

¹⁷ Bertram Silverman, *Man and Socialism in Cuba: The Debate*. New York: Atheneum, 1971.

¹⁸ Bernardo, *Incentives*.

¹⁹ Joaquín Infante Uguarte and other participants in the Debate.

²⁰ Sally Gainsbury, PhD thesis. *Cubanidad* is the collective sense of national identity as Cubans, irrespective of racial, class or religious backgrounds.

²¹ Mesa-Lago, *Ideological*.

the Great Debate has not been definitively defined. Belgian Marxist, Ernest Mandel, one of the foreign contributors and first to label it 'Great Debate', said that it consisted of around 20 published articles, half of them by Guevara.²² The articles appeared in *Nuestra Industria Económica*, *Cuba Socialista* and *Comercio Exterior*.²³ However, within Cuba it is recognised that Guevara's main opponent was INRA president Rodríguez who did not publish on political economy in this period. Guevara and Rodríguez battled it out fraternally as *compañeros* on the government's Economic Commission and in the Council of Ministers.²⁴

The fact that Guevara's main opponent did not publish an article illustrates that the Debate penetrated Cuban administrative structures far more deeply than the handful of articles suggest. Few Cubans had the theoretical background to contribute to the Debate. For example, despite applying the BFS in MINTRANS, Fernández admitted: 'I can't say in that moment that I understood the fundamental differences. I knew that there was a Great Debate because of the discussions which took place in the Council of Ministers and it was explained that there were two lines.'²⁵ There were no manuals written about the BFS, and no seminars, lectures or training courses organised. Guevara spoke a lot about his system in the bimonthly meetings of MININD but for those outside that management circle, his articles were the principal means to learn about his alternative approach to socialist construction. People read the articles and discussed them at their own work places. According to Alfredo González Gutiérrez, who was in JUCEPLAN, most people in administrative positions followed the Great Debate passionately although they were not necessarily able to understand all its implications: 'Anyone who was directly involved in planning tried to understand this discussion. Planning was new and everyone was trying to understand it better. For people like me, Che was a huge lesson. He was so theoretically and culturally

²² Ernest Mandel, 'El Debate económico en Cuba durante el periodo 1963-1964' in Deutschmann (ed) *Debate*, 347-357.

²³ Journals of MININD, the government council and MINCEX respectively.

²⁴ Interviews with Armando Hart, 14 March 2006; Fernández; and Alfredo Menéndez, 11 February 2005.

²⁵ Fernández, interview.

advanced.’²⁶ Juan Borroto, Director of Supervision in MININD, said Guevara criticised the Soviets severely, but not publicly: ‘It wasn’t easy to understand what was happening. The Soviets were giving us everything and Che was criticising them.’²⁷ Jorge Ruiz said that in the bimonthly meetings when Guevara criticised Soviet political economy: ‘we stayed quiet. We didn’t give our own critiques because we didn’t have the necessary education.’²⁸ This is evident from the meeting transcripts.

The exception, however, was in December 1964, when Guevara was challenged in the bimonthly meeting by Alberto Mora who, having been replaced at MINCEX, was invited by Guevara to join MININD as an advisor. Mora said he did not believe that the use of indirect methods, that is, capitalist mechanisms, to direct the economy necessarily diverted society from socialist construction. Guevara disagreed with Mora, explaining that for him the law of value was equivalent to capitalism, and concluded that one of them would be proved wrong but that the discussion would contribute to enrich and deepen an important polemic. ‘Alberto has a commitment to work on a project that needs development and let’s see where we arrive at’, he concluded.²⁹ Juan Valdés Gravalosa, secretary of the management board, was in charge of this project; a manuscript defining the model socialist enterprise. He said: ‘I asked Che, “if Alberto Mora has a controversy with you and defends the other system, how’s it possible for him to work with you?” He said that Alberto just has a different opinion, but this could help him test if he was right or not.’³⁰ This is evidence that the debate: ‘proceeded in an atmosphere of dignity and mutual respect.’³¹ The following summary of Guevara’s position in the Great Debate is divided into three themes: the law of value; money, finance and banking; and consciousness and incentives. This thesis argues, in line with Silverman, that the dispute about the operation of the law of value in transition to socialism was at that

²⁶ Alfredo González Gutiérrez, interview, 27 December 2004. Today González is advisor to the Minister of the Economy and Planning.

²⁷ Juan Borroto, interview, 26 January 2006.

²⁸ Jorge Ruiz Ferrer, interview, 5 April 2006.

²⁹ Guevara, *Bimestrales*, 5 December 1964, 577.

³⁰ Juan Valdés Gravalosa, interview, 22 February 2006.

³¹ Michael Lowy. *The Marxism of Che Guevara: Philosophy, Economics and Revolutionary Warfare*, trans. Brian Pearce, London: Monthly Review Press, 1973, 35.

heart of the Great Debate. The contribution of this chapter is in the selection, interpretation and thematic presentation of Guevara's analysis to highlight his main positions and how they differed from the other protagonists.

THE LAW OF VALUE

*'All the participants supported the proposition that economic institutions and economic goals must conform to the necessities of objective economic forces...But the protagonists disagreed about the nature of the economic laws that regulated Cuban socialist development. Thus, the Great Debate began with a controversy over whether the law of value operated in the Cuban economy.'*³²

The law of value is crucial to understanding Marx's critique of political economy. It has a peculiar and paradoxical function as an economic law, in that it predates and outlives capitalism; its operation is obscured under capitalism, yet it is at the heart of the law of motion of capitalism and finds its strongest expression under the capitalist mode of production. The first condition for the emergence of the law of value is that human society has progressed from subsistence to petty commodity production. Historically, this implies the social division of labour and production for exchange. Society needs a method by which to distribute the social product. All commodities are a product of human labour, in an abstract sense. The quantity of abstract human labour embodied within them is the basis for their exchange. The two provisos are that the commodity is desired in exchange; it has a use value, and that the labour time it embodies is socially necessary; that is, consistent with the average level of productivity.³³

³² Silverman, *Socialism*, 11.

³³ Guevara argued that in a globalised world, particularly in a small country dependent on foreign trade, the concept of average productivity must be considered from an international perspective.

Marx began *Capital* by stating that the wealth of societies in which the capitalist mode of production prevails presents itself as an immense accumulation of commodities. He stated that because the commodity form is most developed under capitalism its analysis is only possible under that mode of production. However, under capitalism, commodities are not exchanged directly in relation to the labour time embodied in them – that is, in relation to the law of value – but according to the price of production, which gives capitals an average rate of profit. This price of production in turn is modified by other factors such as rent, interest, demand and supply, and so on, to establish the market price. The result seems to contradict the law of value. Marx set himself the task of demonstrating how under capitalism the price of production is ultimately determined by the law of value.

The dispute about the law of value in transition economies is at the heart of the question about the feasibility of constructing socialism in a country without a fully developed capitalist mode of production. It is integral to the problems of accumulation, production, distribution and social relations. Communism implies a highly productive society in which conditions exist for the distribution of the social product based on need; not surplus-generating labour time. All the countries which have experimented with socialism, however, have been underdeveloped, lacking the productive base for the material abundance implied by communism. The Soviet solution was to rely on the operation of the law of value to hasten the development of the productive forces which takes place organically under capitalism. Guevara argued that the operation of the law of value is not the only lever to develop the productive forces and that in fact it undermines the collective consciousness which is also a precondition for the construction of communism.

The expression ‘the law of value under socialism’ has been used to denote the existence of a) petty commodity production, as in the USSR prior to collectivisation; b) a socialist country’s foreign trade, where goods are exchanged as commodities proper; and c) the constraints imposed by economic necessity on a socialist country. To the extent that commodity production and exchange through a market mechanism continued to exist after the Revolution in Cuba, it was clear to all participants in the

Great Debate that the law of value continued to operate. The social product continued to be distributed on the basis of socially necessary labour time. However, they disagreed about the conditions explaining the law's survival, its sphere of operation, the extent to which it regulated production, how it related to the 'plan' and, finally, whether the law of value should be utilised or undermined, and if so, how. In Cuba this discussion was linked to practical questions such as how enterprises should be organised, how workers should be paid and whether means of production should be exchanged as commodities. The Great Debate reveals a lot about the conditions and contradictions within the early 1960s Cuban economy. The starting point of the discussion, however, was defining the law of value.

Defining the law of value

Guevara stated that 'value' is brought about by the relationships of production. It exists objectively and is not created by man with a specific purpose.³⁴ He agreed that the law of value continues under socialism, but added that 'the law's most advanced form of operation is through the capitalist market, and that variations introduced into the market by socialisation of the means of production and the distribution system brought about changes that obstruct immediate clarification of its operation.'³⁵

The sphere of operation of the law of value and the survival of mercantile categories in the transition period³⁶

Guevara insisted that products transferred between state-owned enterprises do not constitute commodities because there is no change in ownership: 'We deny the

³⁴ Guevara, 'On the Concept of Value' in Silverman (ed) *Socialism*, 232.

³⁵ Guevara, *Value*, 234.

³⁶ The term 'mercantile' is translated from the Spanish '*mercantil*' which can also be translated as 'commercial'. It is not directly related to the term 'mercantilist' which implies something historically specific; buying and selling commodities at differential prices to make a profit. In the Great Debate *mercantil* is used to indicate commodity production and commercial relations. This discrepancy does make some difference to the sense of the argument. For example, Silverman's translation of Guevara's article on banking, credit and socialism says that the: 'bank's existence is contingent upon mercantile [*mercantil*] relationships of production, whatever high form they may assume', 298. In Carlos Tablada's book the translation reads: 'the existence of banking is dependent on commodity relations of production, however developed they may be.' *Che Guevara: Economics and Politics in the Transition to Socialism*, 2nd ed, New York: Pathfinder, 1990, 138.

existence of the *commodity* category in relationships among state enterprises. We consider all such establishments to be part of the single large enterprise that is the State (although in practice this is not yet the case in our country).³⁷ ‘In expressing our concept of a single enterprise, we based ourselves primarily on Marx’s definition of commodity: “In order to be a commodity, the product has to pass into the hands of a second party, the one who consumes it, by means of an act of exchange.”’³⁸ For Guevara commodity-exchange relations between factories threatened transition, via ‘market socialism’, to capitalism. He stressed central planning and state regulation as substitutes to such mechanisms. Cuba, he argued, should be considered as one big factory. Since the law of value did not operate in exchange between state production units, the workers themselves should decide what socialist, non-value-oriented economic policies to pursue in safeguarding society against capitalist restoration and achieving economic abundance. Guevara’s speeches to workers are replete with appeals for the masses to step up to this challenge.

Ernest Mandel agreed with Guevara, pointing out that if the means of production in Cuba were priced in relation to their inherent values during the initial phase of industrialisation they would cost more than their foreign equivalents because of Cuba’s low productivity. Arguing against the AFS, Mandel stated that the logic of giving ‘freedom’ to enterprises to maximise profits would lead them to purchase means of production from overseas suppliers. But the state monopoly on trade prohibited this; further evidence that the law of value’s sphere of operation was restricted.³⁹

‘It is universally accepted that under the dictatorship of the proletariat individualized production necessarily implies the maintenance of the “commodity” and “money” categories’, stated French Marxist Charles Bettelheim, complaining that the Cubans did not understand that the existence of such categories also requires the existence of a market and some freedom of exchange.⁴⁰ Bettelheim argued that economic

³⁷ Guevara, ‘On the Budgetary Finance System’ (BFS) in Silverman (ed) *Socialism*, 143.

³⁸ Guevara, *Value*, 237.

³⁹ Mandel, ‘Mercantile Categories in the Period of Transition’ in Silverman (ed) *Socialism*, 82.

⁴⁰ Charles Bettelheim, ‘On Socialist Planning and the Level of Development of the Productive Forces’ in Silverman (ed) *Socialism*, 45.

organisation could never be more developed, or higher, than the forces of production. The low technological level of production in Cuba explained the continued existence of the law of value and mercantile categories and attempts to legislate against this, or to change the relationships of production in advance of the productive forces, would be detrimental.

Guevara responded that:

‘Bettelheim commits two grave errors in analytical method: (a) He mechanically translates the concept of necessary correspondence between relationships of production and development of the productive forces, which is of universal validity, into the “microcosm” of the relationships of production in concrete aspects of a specific country during the period of transition; and thus draws apologetic conclusions tinged with pragmatism, about so-called economic calculus. (b) He makes the same mechanical analysis of the concept of property.’⁴¹

For Guevara, Bettelheim’s deterministic formula was dangerously close to ‘orthodox’ Marxists’ view that communism will evolve organically out of fully developed capitalism. The orthodoxy ignores Marx and Engels’ observations about how British imperialism underdeveloped Ireland and India, together with Lenin’s view that imperialism blocks development in the colonies. Revolutionary socialism, Guevara’s tradition, takes up Lenin’s analysis to argue that defeating imperialism is a precondition for economic development and the transition to socialism.⁴² Hence there may be no such mechanical correlation between productive forces and relations of production in the transition period.

⁴¹ Guevara, ‘The Meaning of Socialist Planning’ in Silverman (ed) *Socialism*, 109.

⁴² Guevara, *Planning*, 101.

Using the law of value in the transition to socialism

In 1952, Stalin affirmed that the law of value operated in the Soviet economy and stated the presence of objective economic laws under socialism; ‘the laws of economic development, as in the case of natural science, are objective laws, reflecting processes of economic development which take place independently of the will of man.’⁴³ These statements were used by Cuban supporters of the AFS to validate the utilisation of mercantile categories in their economic management system.

Guevara used quotations from Lenin about the New Economic Policy introduced in the USSR in 1921 and from the Soviet Manual of Political Economy to counter this position and oppose the utilisation of mercantile categories in the construction of socialism:

‘...the *Manual* states: “Mercantile [commodity] production, the law of value, and money will disappear only when the highest state of communism is achieved. But in order to bring about conditions favourable to the disappearance of mercantile production and circulation, it is necessary to *develop* and use the law of value as well as monetary and mercantile relationships while the communist society is being built.”

Why *develop*? We understand that the capitalist categories are retained for a time and that the length of this period cannot be predetermined, but the characteristics of the period of transition are those of a society that is throwing off its old bonds in order to move quickly into the new stage. The *tendency* should be, in our opinion, to eliminate as fast as possible the old categories, including the market, money, and, therefore, material interest – or, better, to eliminate the conditions for their existence.’⁴⁴

⁴³ Joseph V Stalin, *Economic Problems of Socialism in the USSR*. Peking: Foreign Languages Press. 1972. 3-4.

⁴⁴ Guevara, *BFS*, 42. Guevara’s italics.

Guevara believed that a socialist country's task was not to *use* nor even hold the law of value in check, but to define very precisely the law's sphere of operation and then make inroads into those spheres to undermine it; to work towards its abolition, not limitation.

Reflecting on the Great Debate over two decades later, Carlos Rafael Rodríguez claimed that Guevara: 'said that the law of value cannot govern economic activity [under socialism], that socialism had created the conditions for us to manipulate the law of value, to use it for the benefit of socialism.'⁴⁵ The statement was disingenuous because although Guevara initially believed it was possible to use the law of value under socialism, his analysis deepened to reject this view. In June 1963 Guevara questioned: 'How can one consciously use the law of value to achieve a balance in the market on the one hand and a faithful reflection of real value on the other? This is one of the most serious problems the socialist economy faces.'⁴⁶ In October 1963, in response to Mora's claim that: 'under socialism, the law of value operates through the plan',⁴⁷ Guevara responded: 'We are not so sure about this...the law of value will be reflected less and less in the plan.'⁴⁸ In February 1964, in his first overview of the BFS, Guevara concluded: 'We deny the possibility of consciously using the law of value, basing our argument on the absence of a free market that automatically expresses the contradiction between producers and consumers... The law of value and planning are two terms linked by a contradiction and its resolution. We can therefore state that centralized planning is characteristic of the socialist society, its definition.'⁴⁹ In June 1964 he conceded only: 'the possibility of using elements of this law for comparative purposes (cost, "profit" expressed in monetary terms)'.⁵⁰ Guevara complained that the defenders of the AFS never explained how the law of value is supposed to be utilised through the plan.

⁴⁵ Carlos Rafael Rodríguez, 'Sobre la Contribución del Che al Desarrollo de la Economía Cubana' in *Debate*, 365.

⁴⁶ Guevara, 'On Production Costs and the Budgetary System', *Socialism*, 114.

⁴⁷ Alberto Mora, 'On the Operation of the Law of Value in the Cuban Economy', *Socialism*, 228.

⁴⁸ Guevara, *Value*, 235-6.

⁴⁹ Guevara, *BFS*, 143.

⁵⁰ Guevara, *Planning*, 109.

MONEY, FINANCE AND BANKING

*'The difference between the proposals of Che and those who defended Carlos [President of INRA] were in finances, financial mechanisms, indirect or direct. The direct ones are credit, taxes and prices... The Auto-Financing System was linked to bank credit. If there was no bank credit it wouldn't work... The central difference is whether there is financial centralisation or decentralisation.'*⁵¹

Money as means of account

Following the nationalisations Guevara observed from the accounts of US corporations that they did not send bills and issue payments to their own subsidiaries. They developed techniques of accounting, administration and analysis that relegated money to the role of simply recording the value of what had been produced: 'money of account'. Guevara adopted this approach in the BFS:

'Under our system, [money] functions only as a means of measurement, as a price reflection of enterprise performance that is analyzed by central administration bodies so as to be able to control such performance. Under economic calculus [AFS], money serves not only this purpose but also acts as a means of payment, an indirect instrument of control, because without funds the production unit could not operate. Under such circumstances, the production unit's relations with the bank are similar to those of a private producer in the capitalist system who must exhaustively explain plans and prove solvency to his bank... Consequently, because of the way in which money is used, our [BFS] enterprises have no funds of their own. There are separate bank accounts for withdrawal and deposits. The enterprise may withdraw funds in accordance with the plan from the general expense account and the

⁵¹ Infante, interview, 18 January 2005.

special wages account. But all deposits come automatically under State control.’⁵²

Money of account was necessary to ensure the plan functioned as the determinant of production and investment. It strengthened the apparatus of administrative control, which stressed accounting, supervision and inventory control.⁵³

Role of bank in socialism

President of the NBC from 1962, Marcelo Fernández Font was an advocate of the AFS. He envisaged the bank as key regulator of all economic activity, arguing that the bank should pursue ‘control by the pesos’ of enterprises. He quoted Lenin: ‘*Without big banks socialism would be impossible... A single State Bank, the biggest of the big, will constitute as much as nine-tenths of the socialist apparatus.*’⁵⁴ In response Guevara stated that money reflects the relations of production and cannot exist without a society based on commodity production: ‘We may also say that a bank cannot exist without money and, therefore, that bank’s existence is contingent upon mercantile relationships of production, whatever high form they may assume’. Such relations of production would gradually disappear as the development of the productive forces and socialist consciousness created the conditions to undermine the law of value. This did not detract from Lenin’s formulation about the socialist apparatus, however, according to Guevara: ‘The centralization that Marcelo seeks can be obtained by making the Treasury Ministry the supreme “accounting and control” apparatus of the entire State.’⁵⁵

As Treasury Minister, Luis Álvarez Rom, was an ally of Guevara who defended the BFS. The argument about the role of these two financial institutions therefore became a partisan debate about the opposing economic management systems. Nonetheless, Guevara’s point is entirely consistent with his theoretical schema.

⁵² Guevara, *BFS*, 132.

⁵³ Detailed in chapter 7 of this thesis.

⁵⁴ Cited by Marcelo Fernández Font, ‘Development and Operation of Socialist Banking in Cuba’, Silverman (ed), *Socialism*, 280.

⁵⁵ Guevara, ‘Banking, Credit, and Socialism’ in Silverman (ed), *Socialism*, 298.

Credit

BFS enterprises did not control their own finances. They could not get bank credit. Investment plans were submitted to MININD's Vice Ministry of the Economy for analysis and issued from the ministry's budget account. AFS enterprises, on the other hand, could obtain bank credit, although they were prohibited from providing credit to each other. Font argued that: 'credit is a typical banking function that does not disappear during the building of socialism. Rather it serves as a flexible means for helping to assure the proportional and harmonious development of the economy, the fulfilment of the plans.'⁵⁶ Guevara opposed this argument with an extensive quotation from Marx that:

'It should always be borne in mind that, in the first place, money – in the form of precious metal – remains the foundation from which the credit system, by its very nature, can *never* detach itself. Secondly, that the credit system presupposes the monopoly of social means of production by private persons (in the form of capital and landed property), that it is itself, on the one hand, *an immanent form of the capitalist mode of production*, and on the other, a driving force in its development to its highest and ultimate form... Finally, there is no doubt that the credit system will serve as a powerful lever during the transition from the capitalist mode of production to the mode of production of associates of labour... [however] *As soon as the means of production cease being transferred into capital (which also includes the abolition of private property in land), credit as such no longer has any meaning.*'⁵⁷

Font disputed the claim by proponents of the BFS that bank credit is not used in the system. From 1961 to 1963, he stated, the MININD enterprises failed to reach their planned net income and therefore did not substantially contribute to the state budget which was in deficit as a result. According to Font, this was equivalent to the bank

⁵⁶ Fernández Font, *Operation*, 283-4.

⁵⁷ Marx, *Capital*, vol 3, cited by Guevara, *Banking*, 302-3. Guevara's italics.

automatically granting credits equal to the deficits. Any time that the bank provides funds that have not yet been received it is an indirect credit, claimed Font: ‘In summary, bank credit, as an economic category within the State sector of the economy, does not disappear. It has only been disguised. But in the process it has lost its relationship to production and circulation, and its possibilities for economic control have diminished in promise.’⁵⁸ Guevara dismissed this claim:

‘This extends fiction beyond the usual limits. To compare bank credit with the public treasury reveals a mentality that almost confirms Marx’s words: “It was not enough that the bank gave with one hand and took back more with the other; it remained, even while receiving, the eternal creditor of the nation down to the last shilling advanced.” This is not to mention that the bank, as separate from the State, possesses *nothing*, despite the fictitious patrimony granted it by law.’⁵⁹

This reflects Guevara’s vision of Cuba as one big factory.

Interest

Guevara quotes Marx to attack the NBC for charging interest to state enterprises for bank credit: ‘The relations of capital assume their most externalized and most fetish-like form in interest-bearing capital.’⁶⁰ In response to Font’s argument that: ‘Bank credit...always earns an interest, which is the bank’s principal source of revenue.’⁶¹ Guevara replies:

‘If this situation is currently valid – and since interest is not technically an enterprise cost factor but a deduction of the workers’ surplus labor for the society that should constitute a national budget receipt – is not

⁵⁸ Font, *Operation*, 293.

⁵⁹ Guevara, *Banking*, 312. Source for Marx not given.

⁶⁰ Marx, *Capital* Vol 2, cited by Guevara, *Banking*, 303.

⁶¹ Font, *Operation*, 278.

interest in fact used to finance the operating expenses of the banking apparatus?’⁶²

Under socialism, this deduction should be considered as a cost of banking operations, not a private accumulation as in capitalism.

Investment

Font revealed that the bank intended: ‘to decentralise investment control by taking it to the agency level...we will be able to sway investment towards building the foundations for large-scale agricultural production and socialist industrialization.’⁶³

Guevara responded by accusing Font of becoming:

‘... involved in the formal and fictitious aspects of the matter, or what is the same thing, in the fetishism that conceals the true relations of production. This function would only exist if the bank financed investment using its own resources, which, of course, would be absurd in a socialist economy. What the bank does is to allocate the resources of the national budget in the amounts established by the investment plan.’⁶⁴

Under the BFS, said Guevara there is no reason for the bank to become involved in investment decisions, which are political and economic issues for JUCEPLAN. The Treasury Ministry can exercise financial control, as it is responsible for the state budget: ‘This is the only place where surplus product ought to accrue if it is to be effectively employed.’⁶⁵ By ‘effectively employed’ Guevara means in relation to the national development strategy.

⁶² Guevara, *Banking*, 304.

⁶³ Font, *Operation*, 285-6.

⁶⁴ Guevara, *Banking*, 304.

⁶⁵ Guevara, *Banking*, 305.

Financial relations between enterprises

Under the BFS there was no financial relationship between production units or consolidated enterprises. Produce passed on from one to another was categorised as 'delivery of products' not as commodity sales or purchases. Consistent with Marx's analysis that commodities change ownership, Guevara stated that in exchange between state-owned production units there was no transference of ownership. The 'delivery of products' was accorded a 'price' for accounting purposes only and relevant adjustments were made in enterprise accounts held in the central bank. Rather than being subject to market forces, control was maintained through production contracts, regulating quality as well as quantity and punctuality. Failures carried administrative rather than financial sanctions. Surplus means of production could not be sold to other enterprises, but were transferred according to arrangements made by the Committees for Local Industry and approved by Consolidated Enterprise management if they were permanent. Inventories were updated to reflect these transfers.

In the AFS on the other hand, the transference of goods between enterprises was accompanied by financial payments. Surplus means of production could be sold to other enterprises which was a means of accumulating funds to meet financial plans, pay back loans, fund 'decentralised' investments not in the national plan, or finance material incentive schemes for workers.

Production costs

Proponents of both of the BFS and the AFS agreed that lowering production costs was a key to increasing labour productivity. However, under the AFS, this was attained via the profit motive. Under the BFS the focus was on technological and organisational innovations, moral incentives and raising skills levels.

Guevara insisted that production costs be the principal performance indicator. With the BFS, he aimed:

‘to develop an entire system of cost accounting that would systematically reward and punish success and failure in efforts to lower costs... However analyzed, everything is reduced to a common denominator: *increasing labor productivity*. This is essential for building both socialism and communism.’⁶⁶

Administration should be simplified to concentrate on planning and technological development; so cost control would be converted into a mechanical operation, facilitating mathematical analysis to regulate the economy and achieve the best allocation of resources between consumption and capital accumulation, as well as among the various branches of production.⁶⁷

Guevara argued that while general defects in planning, the result of organisational problems and lack of experience and dependency on unstable foreign markets, obstructed cost control: ‘this should not worry us so much as our inability to understand such a phenomenon as soon as it arises.’⁶⁸ He believed the ability to monitor the cost of production in real time would give enterprise directors more control. Incentives should be utilised to encourage the work collective to lower costs. ‘We have several pilot factories in operation in which we are studying systems of collective social incentives that would permit the lowering of costs’⁶⁹ he revealed.

Font subjugates cost control to financial incentives in his defence of the AFS. He argued that while cost control was useful, it was an *a posteriori* control which could not substitute for the enterprise’s self-control ‘by the peso’ in the AFS: ‘premised on the enterprise’s obligation to cover costs with receipts and on making use of the material interest of the enterprise’s workers as a group.’ This was backed up by the consumer and the bank’s financial control via the peso⁷⁰ – a model which reflected the market competition of capitalism.

⁶⁶ Guevara, *Production*, 118-9. Guevara’s italics.

⁶⁷ Guevara, *Production*, 120.

⁶⁸ Guevara, *Production*, 119.

⁶⁹ Guevara, *Production*, 120.

⁷⁰ Font, *Operation*, 292.

Price setting

*'Che arrived at a contradiction. How do you create price when there is no market?... Che realised how complex this theme was and he did not want to make conclusive formulations. He made suggestions, but they were not conclusive points.'*⁷¹

If the operation of the law of value had been undermined, as Guevara claimed: 'How can prices be made to coincide with value?'⁷² The revolutionary government had frozen prices, introduced rationing, benefited from export sales to the Soviet bloc above world market prices and prioritised social justice goals, all of which undermined the market mechanism through which price is determined under capitalism. But Guevara warned against the dangers of a closed economy pricing structure and, especially because of the relative importance of foreign trade to Cuba, insisted that: 'the domestic price structure must remain tied to the price structure of the foreign market.'⁷³

Guevara made pricing structure suggestions first in June 1963 and again in February 1964.⁷⁴ In response to the claim that under the AFS prices were formed in relation to the law of value, he asked: 'which meaning of the law?' His point was that socially necessary labour time is an historical and global construct: 'Continued technological progress, a result of competition in the capitalist world, reduces necessary labor expenditure and thereby lowers product value. A closed society can ignore such changes for a time, but it must always return to these international relationships in order to compare product values.'⁷⁵ Prices could be internally determined, but it could not be claimed that they reflected the operation of the law of value unless international production standards were applied.

Guevara proposed setting up price indices on the basis of following principles:

⁷¹ González, interview, February 2006.

⁷² Guevara, *Production*, 114.

⁷³ Guevara, *Production*, 116.

⁷⁴ Guevara, *Production*, 116-7 & *BFS*, 144.

⁷⁵ Guevara, *BFS*, 144.

1. Raw material imports with fixed and stable prices based on average international market price (plus a few points to cover the cost of transportation and the facilities of the Foreign Trade Ministry).
2. Cuban raw materials priced on the basis of real production costs in terms of money (add planned labour costs plus depreciation costs). This would be the price of products supplied by one domestic enterprise to another, or to the Ministry of Internal Commerce.

These prices would be constantly adjusted by indices reflecting commodity prices on the world market. BFS enterprises would operate on the basis of planned costs and make no profit of their own. All profits would go to the Ministry of Domestic Trade. The indices would show how effective Cuban production is: 'The people would not suffer at all as a result of all these changes, since the prices of the commodities they buy are independently established with an eye to demand and need for each product.'⁷⁶ Decisions on pricing and trade could diverge from the mathematical optimum for political or strategic reasons:

'...but we would always have a mirror before us by which to compare our work with what is actually happening in the rest of the world. Prices will always be viewed with an eye to world-market levels. These will fluctuate in some years in response to technological advances and will change as the socialist market and the international division of labour gain pre-eminence, once a world socialist price system more logical than the one now used is achieved.'⁷⁷

Guevara argued that the conditions of monopoly capitalism from which Cuban socialism was emerging were technically and administratively more advanced than those in Russia in the 1920s. The challenge was to utilise these corporate efficiencies whilst removing the blind motive of profit, the operation of the law of value,

⁷⁶ Guevara, *BFS*, 145.

⁷⁷ Guevara, *BFS*, 146.

and placing them within a different framework – socialism. The debate about the role of money, finance and banking was at the heart of determining how to confront this challenge. Differences with the NBC were not overcome during Guevara's time as a government minister. However, some of his ideas were implemented within MININD: money as account and the abolition of commercial relations between enterprises and other capitalist levers.

CONCIOUSNESS AND INCENTIVES

*'I am not interested in dry economic socialism. We are fighting against misery, but we are also fighting against alienation. One of the fundamental objectives of Marxism is to remove interest, the factor of individual interest, and gain from men's psychological motivations. Marx was preoccupied both with economic factors and with their repercussions on the spirit. If communism isn't interested in this, too, it may be a method of distributing goods, but it will never be a revolutionary way of life.'*⁷⁸

The debate about the use of incentives to increase efficiency and productivity and develop a socialist consciousness was integrally linked to the discussion about the law of value and capitalist categories in the transition to socialism and communism. Guevara's emphasis on moral incentives and collective consciousness has been caricatured as idealist by those who fail to understand this link.⁷⁹ To move away from capitalist laws of motion, socialist society has to distribute the social product in a way which does not equate labour time with value. The absence of the law of value in many areas of economic life presents the challenges of how to equate individual labour time and socially necessary labour time; how to increase productivity; how to overcome the dichotomy between mental and physical labour; and how to reach a healthy balance between investment in the means of production and in the means of

⁷⁸ Guevara, interview with Jean Daniels 1964. Cited by Tablada, *Transition*, 77.

⁷⁹ For example, Mike González, *Che Guevara and the Cuban Revolution*, London: Bookmarks, 2004.

consumption. For Guevara these questions had to be resolved by the conscious action of the workers, whose objective was to construct socialist society. Moral incentives were a tool to create this consciousness and a new concept of work as a social duty. Cuban sociologist Fernando Hernández Heredia explains that: '*conciencia* is the fundamental way in which the interrelation of humans and the environment is expressed: conscious action, consciousness of the ends and domination of the organised subjective factor.'⁸⁰ For Guevara, he explained, consciousness was the means to counter the worst aspects of capitalism inherited by socialism. It was a real and growing force which reproduced itself with efficient revolutionary work: 'Che insisted on the need and the urgency of finding and applying the power of consciousness, via which means a development in the productive forces was assured.'⁸¹

The experience of mass mobilisation during the revolutionary struggle and popular participation in the first years of the Revolution influenced Guevara's view of the dialectic relationship between objective and subjective conditions driving Revolution, social transformation and economic progress.⁸² Guevara believed that the conscious mobilisation of the masses could become an objective factor, even in the economic sphere. During the Bay of Pigs invasion by US-trained exiles in April 1961 and the Cuban Missile Crisis of October 1962, overtime, voluntary labour, innovations, production and productivity increased, while bureaucracy and absenteeism decreased. This was despite many workers being mobilised for military defence. Guevara observed that: 'in moments of extreme danger it is easy to activate moral incentives: To maintain their effectiveness, it is necessary to develop a consciousness in which values acquire new categories.'⁸³

Guevara's ideas were based on Marx's analysis of the impact of the mode of production on human consciousness and social-relations. Marx described the

⁸⁰ Fernando Martínez Heredia, *Che, el Socialismo y el Comunismo*. La Habana: Casa de Las Americas, 1989, 69.

⁸¹ Martínez Heredia, *Che*, 72.

⁸² See Guevara's *Guerrilla Warfare*, London: Pelican Books, 1970.

⁸³ Guevara, 'Man and Socialism in Cuba' in Silverman (ed) *Socialism*, 343. The mechanisms devised to raise consciousness and commitment to production are examined in the next part of the thesis.

sociological or psychological manifestation of the capitalist mode of production as ‘alienation and antagonism’. Communism proposes the opposite – man as a fully developed social and collective being. Guevara quoted Marx ‘the philosopher’ who stressed the problems of man’s liberation as a social being:

‘Communism as the positive transcendence of private property as human self-estrangement, and therefore as the real appropriation of the human essence by and for man; communism therefore as the complete return of man to himself as a social (i.e. human) being – a return accomplished consciously and embracing the entire wealth of previous development. This communism, as fully developed naturalism, equals humanism, and as fully developed humanism equals naturalism; it is the genuine resolution of the conflict between man and nature and between man and man – the true resolution of the strife between existence and essence, between objectification and self-confirmation, between freedom and necessity, between the individual and the species. Communism is the riddle of history solved, and it is conscious that it is the solution’.⁸⁴

For Guevara the obstacle to ‘fully developed humanism’ under communism was precisely the commodification of labour under the capitalist mode of production; a function of the law of value. During the socialist transition to communism, therefore, social relations must change, labour must cease to be a commodity and man must develop a social or collective attitude towards the production process:

‘In order for it to develop in culture, work must acquire a new condition; man as a commodity ceases to exist, and a system is established that grants a quota for the fulfilment of social duty... We are doing everything possible to give work this new category of social duty and to join it to the development of technology, on the one hand, which will provide the conditions for greater freedom, and to voluntary work on the other, based on the Marxist concept that man truly achieves his full

⁸⁴ Marx ‘Economic and Philosophical Manuscripts’, cited by Guevara, *BFS*, 123–4.

human condition when he produces without being compelled by the physical necessity of selling himself as a commodity.’⁸⁵

Guevara believed that the use of capitalist mechanisms in the production process in socialist Cuba risked reproducing capitalist social relations and a capitalist consciousness, despite state planning and state ownership of the means of production:

‘Pursuing the chimera of achieving socialism with the aid of the blunted weapons left to us by capitalism (the commodity as the economic cell, profitability, and individual material interest as levers, etc.) it is possible to come to a blind alley...Meanwhile, the adapted economic base has undermined the development of consciousness.’⁸⁶

Proponents of the AFS believed that economic rationality would automatically lead to social rationality. Guevara disagreed and argued that socialism must develop an economic management system which found a harmony between the two goals; production and consciousness must be built in parallel: ‘To build communism, a new man must be created simultaneously with the material base.’⁸⁷

Given the link between the law of value, labour productivity and incentives to production, it is no surprise that opponents in the debate on the use of mercantile categories also disagreed about incentives. The question of whether the law of value, which predates capitalism, necessarily leads to the development of capitalist social relations is vital. Against the view of Stalin and the pro-Soviets in Cuba, Guevara believed that potentially it does. Thus, undermining the law of value is essential to resolving the conflict between man and nature which Marx wrote about. Rather than believing that the law of value and the way people are conditioned to its functioning could only be undermined with an abundance of material wealth as some proponents

⁸⁵ Guevara, *Socialism*, 346.

⁸⁶ Guevara, *Socialism*, 342.

⁸⁷ Guevara, *Socialism*, 343.

of the AFS claimed, Guevara believed that moral incentives should be developed to undermine the law of value during the process of development.

With 20 years' hindsight, Guevara's chief opponent, Carlos Rafael Rodríguez said that:

'...in the conception of incentives I had very few differences with Che, I insist, very little differences. Our permanent debate, above all, was a debate about proportions, how much to give moral incentives, how much material incentives; the role of education in this. There, in the rhythm of acceleration, is where our differences were.'⁸⁸

Both sides of the Great Debate agree that moral incentives reflect and produce socialist consciousness, and material incentives are necessary in conditions of scarcity and underdevelopment. For example, Joaquin Infante Ugarte, a proponent of the AFS and Director of Prices and Finances in INRA, stated:

'...the enterprise must employ moral and material incentives in appropriate proportions according to the inherent value of the incentive at each point on the road to communism. As we move toward communism, moral incentives should increase at the expense of material incentives. But the latter do not completely disappear during the building of socialism and communism and, properly used, are an inducement to improve quality, increase productivity, and expand output.'⁸⁹

However, Infante concluded his article with a quote from Khrushchev: 'We must proceed down the path of material incentives with energy and boldness, starting with quality and quantity of production.'⁹⁰ In theory, all the protagonists in the Great Debate agreed with the need to gradually replace material with moral incentives. The difference was the pace of this development.

⁸⁸ Rodríguez, *Contribución*, 379.

⁸⁹ Infante, 'On the Operation of the Auto-Financed Enterprise' in Silverman (ed) *Socialism*, 168.

⁹⁰ Nikita S Khrushchev, cited by Infante, *Auto-Financed*, 183.

Guevara recognised that the underdevelopment of the productive forces and the fact that the Cuban consciousness had been conditioned by capitalism meant that there was an objective need for the application of material incentives. But he insisted that they should not be used as the primary instrument of motivation, because they would become an economic category in their own right and impose on the social relations of production. Direct material incentives and consciousness are contradictory terms, he asserted, concluding with his most succinct exposition on the theme.⁹¹

‘If material incentives are in contradiction to the development of consciousness, but on the other hand, are a great force for obtaining production gains, should it be understood that preferential attention to the development of consciousness retards production? In comparative terms, it is possible within a given period, although no one has made the relevant calculations. We maintain that the development of consciousness does more for the development of production in a relatively short time than material incentives do. *We take this stance because our society’s development is generally projected to lead to communism.* This presupposes that work will cease to be a painful necessity and become an agreeable imperative. Such a statement is loaded with subjectivism and requires sanction in the experience we are gaining. If in the course of experience it proves to seriously block the development of the productive forces, then the decision must be made to act quickly in order to get back on familiar paths.’⁹²

The familiar path was the AFS with its use of mercantile categories. The italicised sentence is vital, it expressly states the objective, and defines the paradigm within which Guevara’s conceptions of consciousness and incentives should be discussed.⁹³

⁹¹ Guevara, *BFS*, 134.

⁹² Guevara, *BFS*, 135. My italics.

⁹³ Mesa-Lago quotes this paragraph from Guevara, but omits this key sentence. *Ideological*, 62.

CONCLUSION

Aside from the foreign participants, the protagonists of the Great Debate were involved in a daily search for administrative and technological mechanisms to organise and stimulate the Cuban economy and maintain the enthusiasm and support of the masses. Arguably the challenge of undermining the law of value is the essential one for Guevara. The law, subtle yet domineering, had repercussions which were economic and psychological, manifested in man's perception of his role in society. Guevara's insistence on the importance of undermining the law demonstrated his understanding of just how profound and traumatic was the rupture involved in transition from capitalism to communism. The policies formulated within MININD as part of the BFS were consistent with this understanding of the role of the law of value.

In April 1965, the month when Guevara left Cuba to fight a guerrilla war in the Congo, Fidel Castro said:

'...beware of those Marxist-Leninists who are only and exclusively worried about philosophical questions, for socialism has many practical and serious problems to solve. And it is the duty of Marxist-Leninists to solve them, a duty which becomes more essential when we realise that it is precisely revolutionary power that offers the greatest possibilities of solving them.'⁹⁴

Indeed, Guevara had enjoyed a rare opportunity to deepen his theoretical analysis with the experience of applying his ideas in revolutionary Cuba. It was an exciting and dynamic process, examined in detail in Part Three of the thesis. The important contribution of the following Part Three is twofold. It provides the first systematic record of Guevara's work as Minister of Industries, detailing the practical policies and structures developed to concretise his theory and the problems which he aimed to

⁹⁴ Fidel Castro from *El Mundo*, Havana, 20th April 1965, cited by John D. Martz, 'Doctrine and Dilemmas of the Latin American "New Left"' in *World Politics*, Vol 22: 2 (Jan, 1970), 195.

solve. Additionally, it illustrates how these formulations were directly linked to his theoretical conceptions; how those policies and structures aimed to undermine the operation of the law of value in Cuba's transition to socialism.

PART THREE

Guevara's solutions

Prologue

*'So you would like us to turn Cuba into a sort of seminar for intellectuals, a Parisian cafe where people can sit down and rave about the latest literary hits. But what kind of country do you think ours really is? Cuba is in the midst of a revolution, besieged by US Marines; she must see to her defenses and build her future. It is not for fun that we have decided to rush our children from secondary schools to high schools and from high schools to universities. It is because we have to act quickly and because we have no choice in the matter... In very quick succession, we have been taught the meaning of economic blockade, subversion, sabotage, and psychological warfare...'*¹

The theoretical debates about socialist construction that have taken place in the socialist countries since the 1920s have had direct and serious consequences on the development strategies and policy formulations in those countries. However, Guevara's contribution was qualitatively different because it bridged two oppositional schools of Marxism. On one side were Soviet theorists, or what Ernst Nolte called 'state' Marxists: 'lacking critical distance toward their own state and government'; on the other hand their critics, western or 'free' Marxists, who enjoyed 'the most radical and total form of critical distance.'² Guevara's conflict with the Soviet system seemingly placed him in the theoretical camp of the western critics. But his approach had no such critical distance because, unlike the 'free' Marxists, Guevara's analysis had serious practical consequences and was part of the Cuban state's commitment to building socialism.

¹ Guevara cited by K S Karol, *Guerrillas in Power*, trans. Arnold Pomerans. London: Jonathan Cape, 1971, 46-8. Guevara was responding to Karol's criticism of the use of Socialist Bloc manuals on 9 May 1961.

² Nolte concluded that during the Cold War: 'free Marxism fought in the front lines for the Western cause.' Ernst Nolte, 'The Relationship between "Bourgeois" and "Marxist" Historiography', *History and Theory*. Vol 14: 1 (Feb 1975), 68-70.

As Marx's dictum goes: men make history, but not in conditions of their own choosing.³ Guevara rejected the idea of theory being formulated in a vacuum. This explains the apparent contradiction of Guevara both criticising the Soviet bloc and responding angrily to K S Karol's complaint about the Cubans using Soviet manuals. 'Have you got any others you can recommend?' Guevara demanded, according to Karol, and: 'spoke scathingly of "liberals" who wanted the Revolution to remain ideologically neutral, and to give everyone perfect freedom to choose between a host of social philosophies and doctrines.'⁴ Unlike 'free' Marxists, whose criticism of Soviet socialism took the form of an intellectual exercise, Guevara was in a position to concretise his analysis by creating an alternative economic management system which attempted to undermine the law of value and place man at the centre of development. It is one thing to criticise the lack of 'humanity' in existing socialism, but another to formulate a policy which actually develops socialist consciousness. Guevara complained that instead of devising policies consistent with Marx's analysis, Soviet theorists had adapted theory to accommodate empirical reality.⁵ His challenge was to demonstrate that such compromising pragmatism was not necessary; that it was possible to construct a socialist system which could develop the productive forces and create socialist consciousness simultaneously, thus preparing society for a transition to communism. Guevara's vision of socialism was additionally influenced by the traditions of Latin American struggles for national liberation with social and economic justice. As Ken Cole stated: 'we find in Che Guevara an unequalled integration of Martí's insights and Marx's theory, into a revolutionary practice by which people might liberate themselves by becoming aware of their social potentials.'⁶

Part Three, the core of the thesis, details the institutional mechanisms and policies that Guevara developed to achieve this within the Ministry of Industries, 1961-5, and demonstrates how they link to his Marxist formation. Despite the importance of Guevara's contribution to both the theory of socialist transition and to the Cuban

³ Karl Marx, *The Eighteenth Brumaire of Louis Bonaparte*. Moscow: Progress Publishers, 1977, 10.

⁴ Karol, *Guerrillas*, 46.

⁵ Details in chapter 11.

⁶ Ken Cole, 'The Cuban Revolution: Martí's insight, Marx's theory and Guevara's practice; lessons for socialist development in the 21st century', paper, January 2004, 28.

economy, this history remains largely unknown. The Budgetary Finance System (BFS) was Guevara's solution to the challenge of socialist transition in conditions of underdevelopment without relying on capitalist mechanisms. The policies under examination were developed concurrently, however, the thesis structure has imposed a thematic division in order to focus the investigation and organise the narrative. Part Three is divided into five chapters: education, training and salaries; administrative control, supervision and investment; collectivising production and workers' participation; science and technology; and consciousness and psychology. Each chapter explains the practical problems which those specific policies were designed to overcome, the obstacles encountered in their application and demonstrates how they link to Guevara's theoretical conceptions about socialist transition.

The chapters illustrate the dichotomy between Guevara's theoretical ideals, his paradigm for socialist transition, and the historical reality, which served as a major obstacle: underdevelopment of manufacturing, metallurgy, mechanics, electronics and chemical industries; the blockade, lack of spare parts and the low productivity and efficiency of means of production bought from the socialist countries; the low levels of education, accountancy knowledge and technical training of the general population; and the chaos incurred by the sudden nationalisation of industry, the exodus of management professionals and the technical inadequacy of their substitutes. In the search for solutions to both the theoretical problems of socialist transition and the concrete problems of Cuba's economic development, key characteristics stand out: the concept of Cuba as one big factory; learning by doing, the process of trial and error and making improvements *sobre la marcha* [on the move]; criticism and open debate, including self-criticism, getting to the root of a problem in order to resolve it; not allowing the US blockade to be an excuse for production problems; working with experts regardless of their ideological affiliations, dependence on key personnel with huge responsibilities and Guevara's tendency to demand most from his closest collaborators; adopting the most advanced technology available, whether it be management techniques or means of production, laying the groundwork for technological advances even while struggling to overcome backwardness; and a flexible approach to the questions of control, decentralising to

encourage initiative and centralising to ensure control. In detailing this rich and complex history this thesis illustrates Guevara's most important contribution to economic history and the history of economic thought.

CHAPTER 6

Guevara's solutions: education, training and salaries

*'The training of active workers begins in the workplace at the most basic educational level: the elimination of any remaining illiteracy in the most remote areas; continuing education courses and, later, workers' improvement courses for those who have reached third grade; courses in basic technical skills for the better educated workers; extension courses to turn skilled workers into assistant engineers; university courses for all types of professionals and also for administrators. The revolutionary government intends to turn our country into a big school where study and success in one's studies become a basic factor for bettering the individual, both economically and in his moral standing in society, to the extent of his abilities.'*¹

José Martí's words 'to be educated is to be free' were echoed as a key battle cry in the revolutionary struggle against Batista in 1950s Cuba. In November 1956 the 26 July Movement (M26J) drafted its educational policy to be launched simultaneously with the guerrilla campaign of the Rebel Army.² The self-taught Ernesto 'Che' Guevara shared the view that education was part of the armoury of revolution and that educating the poor was a precondition for winning the struggle against imperialist domination, preparing them to seize power themselves. For Guevara education was synonymous with culture: the appreciation and assimilation of knowledge from science to art. Culture was part of what distinguished the 'new man' of socialism/communism from the proletariat under capitalism who, in Marx's

¹ Ernesto Guevara, 'Against Bureaucratism', in David Deutschmann (ed) *Che Guevara Reader*, Melbourne: Ocean Press, 1997, 161.

² 'Revolutionary Proclamation of Santiago de Cuba and the Sierra Maestra', drafted by the 26 July Movement (M26J) in November 1956 for release following the landing in Cuba of the *Granma* boat from Mexico. Cited by Armando Hart, *Aldabonazo: inside the Cuban revolutionary underground, 1952-1958*, London: Pathfinder, 2004, 277-282.

words: 'live only so long as they find work, and who find work only so long as their labour increases capital.'³ Education was a constant and dynamic process in which the revolutionary had to engage daily as a means of self-improvement and, through that, social development.

Antoni Kapcia noted that: 'any analysis of education in Cuba since 1959 has to recognise that education is politics, that politics means revolution and that revolution has been largely a search for a new national identity.'⁴ For Guevara that new identity was *Cuba Socialista*, for which education acquires three key functions in economic development and transition to socialism: first, education as culture, in the form of basic literacy classes for the Rebel Army during the war and in La Cabaña; second, political education, teaching Cubans about imperialism, class struggle, the revolutionary process, socialist construction and forging the commitment to work as a social duty; and third, education for production, learning accountancy, specialisation, technical training, developing the capacity for abstract thought to assist in the management of complex industries. These aims were concretised as part of Guevara's solutions within the Budgetary Finance System (BFS) and are detailed below.

Guevara himself had always had an insatiable appetite for knowledge and a proactive approach to learning. During his childhood and youth, bouts of asthma confined him to bed where he read widely and prolifically. At 17 years of age, Guevara developed a routine of listing and commenting on his reading material in notebooks. He then added indexes: a methodological approach to knowledge which demonstrates scientific rigour.⁵ The indexes illustrate the breadth of Guevara's cultural interests; more so given that this reading was additional to his school and university education. After January 1959, Guevara's reading became more focussed and even broader. He

³ Marx, Karl and Frederick Engels, *Manifesto of the Communist Party*. Moscow : Progress Publishers, 1975, 51.

⁴ Antoni Kapcia, *Education, Culture and Identity in Cuba: appraising the role of education in shaping and defining society* paper presented at the Institute for the Study of the Americas, University of London, 29 October 2004.

⁵ All but one of these notebooks is held in the archive at the Che Guevara Study Centre in Havana. The content is discussed in chapter 10.

embarked on a serious study of Marxist classics and socialist political economy, but also studied management theory from the corporate capitalist world. He learnt Cuban history and devoured the works of Cubans, including José Martí and Nicolás Guillén, and political and military history from around the world. He studied maths from 1959 and, when his teacher Salvador Villesca declared there was nothing more he could teach Guevara, he began a course of advanced maths set theory, with Dr Hugo Pérez Rojas.⁶ He studied accountancy with Harold Anders, and became the teacher in the management council's study circle for linear programming, a mathematical technique that can be used to predict optimal conditions for production. The Vice Minister of Technical Development, Tirso Sáenz, recalled that Guevara told the Management Council: 'you are dealing with so many problems that you are not thinking in the future, you are not even thinking in the present. Computing is a reality in the world and you have to start learning about it.'⁷ He handed out a book on linear programming to study for the following week. Council secretary Juan Valdés Gravalosa said: 'That next Monday, we were waiting for a teacher and Che was at the drawing board; it was Che who gave us classes'.⁸ All of this was in addition to managing the largest ministry in Cuba and to his numerous political and military responsibilities of state. A look at Guevara's Monday schedule from this time demonstrates what this meant in practical terms: 7am, teaching linear programming; 8am, MININD management council meeting; 2pm, annual reports for each Consolidated Enterprise (EC) discussed; 9pm, higher maths.

Guevara had lessons from specialist accountant Harold Anderson. In 1964 he began a course in probability and theories of information which was understood by only two or three people in Cuba at that time. Miguel Figueras, director of the Perspective Plan in MININD, participated in this course which was taught by a professor Martíz from the Faculty of Physics at Havana University.⁹ Guevara studied Swahili in the Congo and Quechua in Bolivia. He also made them compulsory for the Cuban troops

⁶ Jiménez Velo, interview, 6 February 2006 & Tirso Sáenz, interview, 2 February 2006. Rojas is today at the Instituto de Cibernética, Matemática y Computación.

⁷ Sáenz, interview, 7 January 2005.

⁸ Juan Valdés Gravalosa, interview, 22 February 2006.

⁹ Miguel Figueras, interview, 27 January 2006. See Chapter 9 for details of the Perspective Plan.

under his command; and he taught them French and maths as optional extras.¹⁰ According to Harry Antonio Villegas Tamayo, one of just two Cuban soldiers in Bolivia to survive and escape when Guevara himself was killed, Guevara had written a list of 300 books which they were instructed to buy in Argentina and Brazil on their way to Bolivia. 'This is because he wanted to write about philosophy' whilst in the mountains, affirmed Villegas.¹¹ Guevara had already written an economic critique of the Soviet Manual for Political Economy, whilst in Prague after the failed military campaign in the Congo.

To appreciate both the necessity for the educational drive and its achievements it is essential to understand the crisis which resulted from the exodus of professionals and the lack of revolutionary substitutes. This will be followed by an examination of how Guevara's concept of permanent improvement was institutionalised within MININD. Next there will be a discussion of the policies developed to foster the concept of work as a social duty: breaking the link between work and remuneration, and educating the unemployed. Integral to this are salaries, inflation and the role of the trade unions, which since the 1940s had been preoccupied with defence of their member's pay and conditions and imbued with 'economistic' tendencies, thus negating class struggle and the struggle for socialism. The new salary scale attempted to reconcile these factors and is illustrated in the final section.

EXODUS OF PROFESSIONALS

According to the 1953 census 31% of Cubans over six years old had no schooling; another 29.4% had three years' schooling or less. Effectively, 60% of the population lacked education. 3.5% had received high-school education and just over 1% had university education. The illiteracy rate of the rural population over ten years old was

¹⁰ Harry Villegas Tamayo, interview, 22 March 2006.

¹¹ Guevara was captured by the army in Bolivia with books by Lenin, Trotsky, Pablo Neruda and Nicolás Guillén's poetry and a biography of Karl Marx. The other Cuban survivor was Leonardo Tamayo.

41.7%.¹² Cuba had a small urban professional elite. Most industry was owned by foreign companies, predominantly from the US, which tended to staff their facilities with their own nationals; enterprises in Cuba were operated by US managers and technicians. Many of the Cubans in managerial positions had been trained in the US and used their connections to resettle there shortly after the Revolution. Of the 2,000 engineers in Cuba 1958, only 700 remained after the nationalisations of 1961. In the petroleum industry 75% of engineers and almost all the managers left within one year of nationalisation. Fidel Castro described the early days: 'when there was nothing, no experience, no cadre, no engineers, no economists, no technicians hardly; when we were left with almost no doctors, because 3,000 of them left out of the 6,000 there were in the country.'¹³

The professionals left because they recognised that as the Revolution radicalised it was not favouring their interests, as individuals or as a class. However, Guevara worked to encourage technicians and managers to stay, confident that the experience of integration into the revolutionary process would help them to reconcile their individual interests with those of society. Guevara talked openly in Leninist terms about the historical position of technicians and engineers as privileged workers, the labour aristocracy, and acknowledged their general detachment from the ideological sweep of the Revolution. However, he believed that as long as they were not organising as a class against the Revolution, their incorporation into production was essential and beneficial for socialist society. Even without developing ideological commitment, they could transfer technical skills to a new generation of revolutionary cadre.¹⁴ Miguel Figueras gave examples of experts who stayed to work with the Revolution: 'they were brilliant people and Che used their help and maintained their much higher historic salaries. I believe this was a very smart policy of Che not

¹² Leo Huberman and Paul M Sweezy, *Cuba Anatomy of a Revolution*, New York: Monthly Review, 1960, 95.

¹³ Fidel Castro, 'Discurso pronunciado por Fidel Castro el 8 de octubre de 1987 en el acto central por el vigésimo aniversario de la muerte de Ernesto Che Guevara, in *Ernesto Che Guevara: El Gran Debate sobre la economía en Cuba*, Melbourne: Ocean Press, 392. The Cuban film *Memories of Underdevelopment*, directed by Tomás Gutiérrez Alea, 1966, examines the decision by the Cuban elite to leave or stay in Cuba.

¹⁴ Case studies of Guevara giving personal attention to specific technicians whose knowledge was essential in key areas of production are cited throughout the thesis.

to push them aside, but to engage these very intelligent people. Many of these people had families that had left or they wanted to leave and Che worked with them to bring them close to the Revolution.¹⁵

Guevara conceded that technicians should be better paid than lesser skilled workers during socialist transition, while remuneration remained tied to labour, but they would not receive political or social privileges over other workers. He said: 'They will be better paid because the law of demand and supply still functions, to a certain degree; and it is necessary to have technicians, to pay them better; so they carry out their tasks better.'¹⁶ On the other hand, he also believed that technicians responded to moral incentives sometimes better than the average workers, because they enjoyed recognition for their achievements and expertise.¹⁷ Guevara lamented that technical expertise and revolutionary commitment were rarely combined but he still aspired to have an engineer in every enterprise. This would be achieved with:

'... old technicians beginning to incorporate themselves into the Revolution, called by the sense of justice that everyone has inside, they will start to understand socialism; and new technicians who are born with a different consciousness, who will incorporate themselves into our enterprises. It would be ideal if in the Mineral enterprise there was an engineer of the mines with 20 years experience, not this comrade Herbella who was a travelling salesman of I don't know what.'¹⁸

Tirso Sáenz's story indicates, firstly, that the exodus of technicians was not necessarily an expression of political antagonism to the Revolution, but motivated by individual self-interest, and, secondly, that non-political professionals did become ideologically committed to the socialist revolution. Having trained in the US as a chemical engineer, Sáenz worked in Cuba for Proctor & Gamble, who, following

¹⁵ Figueras, interview.

¹⁶ Guevara, cited by Orlando Borrego, *El Camino del Fuego*. La Habana: Imagen Contemporánea, 2001, 172.

¹⁷ Guevara, 'Reuniones Bimestrales', 20 January 1962, in *El Che en la Revolución Cubana: Ministerio de Industrias*, Tomo VI, La Habana, Ministerio de Azúcar [MINAZ], 1966, 266.

¹⁸ Guevara, *Bimestrales*, 14 July 1962, 266.

nationalisation of the company, offered him a new job in Cincinnati. The prospects were good so, although he had nothing against the Revolution or Castro, in October 1960 he went to the US embassy with a letter from P&G Vice President Fritz Garber stating that he had employment in Cincinnati and requesting a visa. But the embassy staff spoke to Sáenz in what he considered a demeaning tone, demanding proof of his university degree:

'I said to "go to hell!" and I left. My wife was waiting at home: "What happened?" she said. "We are going to stay and see what happens", I told her. The next day I had responsibility for five or six different posts, because other people had left. The blockade was already in place. There were no raw materials, nothing. I was trying to be an alchemist, producing soaps, detergents, toothpaste and shampoo out of nothing.'¹⁹

In February 1961, the Ministry of Industries interviewed Sáenz in search of a 'revolutionary engineer' to be vice director of the petroleum industry. 'Four months after I was in the US embassy I was considered a revolutionary engineer, because I was doing a good job, not just talking. And this was a revolutionary act. I was not working for myself and P&G anymore; I was working for the Cuban people. That gave my work a new dimension.' Sáenz got the job, which involved mediating between the technicians and the government to maintain production and prevent sabotage: a kind of political commissar. Nervous of his own record, however, he requested a meeting with Guevara.

'I told Che the story and then he asked me "Do you want to leave the country?" I said "No!" "Do you want to work with us?" I said "Yes I do." He said "Ok, I think you are an honest man so let's work. Go and work." And he never raised the issue again, he never referred to me as the one who wanted to leave the country.'²⁰

¹⁹ Sáenz, interview, 2005.

²⁰ Sáenz, interview, 2005. Sáenz became Vice Minister of Technical Development in MININD 1963.

Every institution in Cuba, MININD included, was full of under-qualified revolutionaries 'learning by doing'. Most importantly, they were loyal to the Revolution; their educational level and lack of experience could be resolved on the job. Guevara said the challenge was to: 'fill the vacancies left by the traitors and to meet our need for a skilled work force resulting from the rapid rate of our development. That is why training is the top priority of all the revolutionary government's plans.'²¹ Education and training were integrally linked to production and the needs of industrialisation. This linked individual improvement with economic development and the progress of the Revolution.

EDUCATIONAL DRIVE

Guevara's commitment to constant learning and his vision of the revolutionary as social vanguard combined in his pedagogical approach to those around him. Harry Villegas joined Guevara's column in the Sierra Maestra aged 17 and became his body guard, leaving Cuba to fight with him in the Congo and Bolivia. He said:

'His book *Guerrilla Warfare* begins by stating that guerrillas are social reformers, so Che said they should have the cultural level to be able to reform. He believed that regardless of the educational level we already had we had to prepare ourselves to play a role in constructing the new society. Every time there was an opening during the struggle he looked for the possibility of creating a school.'²²

Building schools and studying helped keep the troops occupied between combat and meals, both of which were infrequent. Guevara gave literacy classes and general education to his troops and local people in periods of non-combat: maths, Cuban history, war strategy, and the Mambisi resistance to Spanish colonists. They would read in groups and discuss the material. Guevara even read the poetry of Pablo

²¹ Guevara, *Bureaucratismo*, 161.

²² Villegas, interview.

Neruda to the young soldiers.²³ The troop education was formalised in the first days of January 1959 when La Cabaña fortress in Havana was turned into *Ciudad Libertad* (Freedom City). He invited teachers and other university graduates, members and supporters of the M26J and PSP to provide literacy and political education for his troops. Maria Teresa Sánchez was among them. She said:

‘He emphasised the importance of the soldiers’ understanding why we wanted to educate them, why we wanted to prepare them; that they were the ones who were going to complete the future tasks. Che knew that many of them would return to their homes, but at least they would return literate... We gave classes in the morning: reading, writing, mathematics. A group of us gave them political indoctrination and history. I talked to them about Cuban struggles, the situation of workers, their leaders and the sugar cane. We introduced them to Marxism and discussed how the workers lived. We worked on the level they were at because we didn’t want to alarm them. They were very conscious of the role they would play in the future. Those who weren’t interested left the army.’²⁴

Once the soldiers had basic literacy, they went on to other education, training and military schools. Fred Judson detailed the political education of the Rebel Army, from 1953 to 1963. In the post-1959 period of institutionalisation, he stressed the importance of educational material published for the military apparatus, purged of Batista loyalists and reorganised as the Revolutionary Armed Forces (FAR), in raising the political level and commitment to the radicalisation of the Revolution:

‘[It] was not aimed exclusively at creating anti-imperialist convictions. It was also aimed at constructing an army with a social conscience; an army

²³ Neruda recalled meeting Guevara: ‘I was flattered by what he told me about my book *Canto General*. He would read it to his guerrillas at night, in the Sierra Maestra. Now, years later, I shudder when I think that my poems accompanied him to his death... I keep seeing in Che Guevara that pensive man who in his heroic battles always had a place, next to his weapons, for poetry.’ Pablo Neruda, *Memoirs*, London: Souvenir Press, 2004, 323.

²⁴ Maria Teresa Sánchez, interview, 8 March 2006. Camilo Cienfuegos did the same with his Rebel Army column in the Columbia barracks.

prepared to carry out land reform and innumerable construction projects; an army prepared to be involved in production; an army prepared to root out corruption; an army prepared to administer a whole series of reforms... Such political education was not exclusive to the Rebel Army. The revolutionary leadership intended to educate a whole people, both to prepare it for coming struggles and, as a matter of principle, to equip the people with the skills necessary to build the society of the revolutionary vision.²⁵

A number of publications were produced to assist in literacy training and political education and for general reading. The vocabulary and content varied according to the degree of literacy of their readership. But all materials emphasised the continuity of struggle: both from the wars for independence to the Revolution of 1959 and from the war against Batista to the struggle to consolidate the new state. The attainment of literacy was portrayed as a blow against the old regime where ignorance served the dictatorship: 'To read and write is a new weapon and you should care for it as you care for your rifle.'²⁶ Publications included: *Arma Nueva*, *Alfabetizamos Venceremos* and the weekly magazine *Verde Olivo* whose readership in the army and militias was in the hundreds of thousands and which was also available to non-military readers. As director of education and director of the orientation courses for the FAR from March 1959, Guevara regularly contributed to these publications. He wrote the introduction to the Manual of Civic Training, training booklet published in January 1960 for educating soldiers, stating that it served all Cubans, not just the army.²⁷ According to Judson, the content of the Manual was already anti-imperialist and influenced by Marxist concepts a year before the declaration of socialism.²⁸

²⁵ C Fred Judson, *Cuba and the Revolutionary Myth: The Political Education of the Cuban Rebel Army, 1953-1963*, Colorado: Westview Press, 1984, 237.

²⁶ *Verde Olivo*, 27 March 1960, cited by Judson, *Myth*, 265.

²⁷ Fernando Hernández Heredia, Seminar. *pensamiento militares de Ernesto Che Guevara*, Diplomado: Pensamiento Latinoamericano, Che Guevara. Facultad Latinoamericana de Ciencias Sociales (FLACSO), University of Havana. 19 January 2006.

²⁸ Judson, *Myth*, 237.

In January 1959 the new government established a Ministry of Education. Within 16 months it had increased expenditure on education by 10%; school capacity increased by 25% and teaching staff by 30%. In the previous 57 years since the establishment of the Republic, just one new school had been built in Havana. The new government build 37 new schools in Havana alone.²⁹ This expanded state education provision was free, or workers were paid to study, thus removing all barriers to entry presented by the thriving industry of private education, in which around 90,000 Cubans were enrolled by 1949.³⁰ Armando Hart, a leading member of the M26J urban wing and Minister of Education from January 1959, explained that:

‘Five thousand classrooms for nine thousand unemployed teachers could be created just with the financial resources available in the long list of “*botellas*” [absentee teachers] paid by the Ministry of Education of the old regime. When I told Fidel I was going to devote myself to creating five thousand classrooms, he pointed out that we should talk to the teachers and ask them to cut their salaries in half and thus create twice as many classrooms – ten thousand – with agreement that their salaries would be raised gradually in a short number of years. That’s what was done.’³¹

In 1960 the literacy campaign was launched and achieved its goal of eradicating basic illiteracy within one year. Over 300,000 Cubans, including 100,000 students, many in their early teens, travelled across Cuba teaching more than 700,000 people to read and write, simultaneously experiencing how the country’s poorest lived, reinforcing the sense of *Cubanidad* and an understanding of the profound social change ushered in by the Revolution. Armando Hart said: ‘Youth who were too young to participate in the struggle against the tyranny were given a no-less important task at the triumph of the Revolution: that of defending the country and the revolutionary program, one of whose points was the elimination of illiteracy.’³² In

²⁹ Huberman, *Anatomy*, 97.

³⁰ Laurie Johnson, ‘Cuban Nationalism and Responses to Private Education in Cuba, 1902-1958’, in Will Fowler (ed), *Ideologues and Ideologies in Latin America*, Westport: Greenwood Press, 1997, 39.

³¹ Hart, *Aldabonazo*, 304.

³² Hart, *Aldabonazo*, 305.

December 1960 the establishment of Schools of Revolutionary Instruction was announced to overcome the lack of professionals versed in Marxism-Leninism and to counter the tendency to action devoid of analysis.³³

'ILLUSTRIOUS ILLITERATES' AND *SUPERACIÓN*

MININD was set up in February 1961 with four vice ministers: Orlando Borrego, Omar Fernández, Mario Zorrilla and Gustavo Machín. Like Guevara, Fernández had a medical degree, but none of the others had a university qualification. Fernández left to be Minister of Transport and was replaced by José Manuel Castiñeiras, who also lacked a university degree.³⁴ The MININD management council were affectionate known as the 'illustrious illiterates'. Likewise, of the nearly 40 Consolidated Enterprise (EC) directors, only three were university graduates. Few of the factory administrators even had middle-school qualifications, with the exception of a handful of complex plants, such as petroleum refineries.

In this context, the educational drive was institutionalised into the MININD apparatus, to engage everyone in constant *superación*, self-improvement, from those who had just learned to write their own names to the specialist advisors whom Guevara urged to study new degrees and specialisations. Classrooms were created in every production unit. Sáenz explained how this was possible given the exodus of professionals:

'Every worker, every engineer, every man with a slightly higher level than the rest, was able to teach. Really! You had a course for everything. Everybody was studying. Workers, older people were contracted as teachers. When did this take place? Some were practical classes, for example minimum technique, which was studied during the

³³ Lionel Soto, 'Las Escuelas de Instrucción Revolucionaria y la Formación de Cuadros', in *Cuba Socialista*, Año 1: 3, (November 1961), 30.

³⁴ Tirso W Sáenz, *El Che Ministro: Testimonio de un Colaborador*. La Habana: Ciencias Sociales, 2005, 52-54.

working day. Most classes were outside the working day. How often? Every course had its own structure and organisation. Were the classes obligatory? No, but everybody went, because it was important. You see the importance of ideological work, people felt that they needed to improve their qualifications; they even felt pride in studying.³⁵

José Luis Puñales was one of those who transformed immediately from pupil to teacher. In 1961 he studied in the school for Political Commissars. Having previously studied in the School of Commerce, once he graduated he was asked to stay on and teach. The course included political economy, history and Marxist philosophy.³⁶

Guevara had a reputation for being most demanding of his closest colleagues and collaborators. Juan Alberto Castalleños Yillamar was one of his four bodyguards:

‘One day he said to us: “Well lads, you know that you are *compañeros* with sufficient merits for us to give you any task, but, if you don’t study, in ten years you may have more merits but we will have to replace you with those who have knowledge. You will have to retire with a little salary.” He gave us a teacher.’³⁷

On return from his trip to the leading non-aligned countries, Guevara checked the class register and seeing that Villegas and Castañellos had skipped classes he punished them with one month’s labour on a farm outside Havana. Guevara forced them to accept the discipline of *superación*, as they had the discipline of the guerrilla struggle.

The policies formulated to institutionalise *superación* in MININD are examined below. EC directors were given exams at the start of the bimonthly meetings, testing their statistical and accounting knowledge of the production units under their

³⁵ Sáenz, interview, 2005.

³⁶ Jose Luis Puñales, interview, 21 January 2005.

³⁷ Juan Alberto Castalleños Yillamar, interview, 1 March 2006.

jurisdiction.³⁸ They were threatened with replacement if they failed to get 60% on three occasions. Guevara criticised members of the Management Council of MININD for not participating in study circles, arguing that constant study was essential to prevent the creation of bureaucracy: 'There are several people who have a circle of political economy...others content themselves with the professional experience that they have and others simple with daily work... this will produce a coarsening of people; bureaucratisation and standardisation, that will lead to work of bad quality and a decline, in the long term, in the effectiveness of the comrades.'³⁹ Puñales said: 'With Che you had to study continuously. Almost all of us had a commitment to get into university. That was something that he struggled hard for.'⁴⁰

Edison Velázquez was named director of the EC of Nickel. Just 20 days after arriving at the huge and complex Nícaro nickel mining plant in eastern Cuba, Guevara visited him there to assess how he was getting on. Velázquez recalled: 'Che asked me how much a ton of nickel was, and I didn't know. He shouted at me saying: "You are an irresponsible person; you are in charge of the most important industry in the country!" He was furious. So I studied with the technicians about the factory processes, accounting and costs in the different areas. Che obliged you to study. He gave you exams.'⁴¹ In the bimonthly meeting of February 1964 Guevara referred to this case, stating that the director relied entirely on the advice of technicians because he lacked knowledge of the industry: 'Well then there is an obligation to study systematically all of the problems of nickel, in order to learn.'⁴² He suggested the EC of Electricity organise a study course for other directors.

For Guevara, it was vital to study the theory in the process of daily practice; the balance was essential: 'Now to invent theory totally on the basis of action is foolish... This is not to say that we have to become philosophers, nor become great economists, but we have to have basic knowledge.'⁴³ Intellectual work was vital for

³⁸ Detailed in chapter 7.

³⁹ Guevara, *Bimestrales*, 9 March 1963, 340.

⁴⁰ Puñales, interview.

⁴¹ Edison Velázquez, interview, 21 January 2006.

⁴² Guevara, *Bimestrales*, 22 February 1964, 461.

⁴³ Guevara, *Bimestrales*, 22 February 1964, 462.

developing the capacity of abstract thought necessary to administer a complex factory or direct an EC. In July 1962, he said that administrators who are exemplary in workshops often fail when faced with complex management operations because they lack this intellectual training:

‘...when that good worker arrives at a bigger factory, he starts to have problems, because there he has to confront problems of organisation; he cannot move this big factory with his personal example, he does not have time, it is not possible, there is not the direct contact... a low scholarly level weakens the director’s ability to work with a little abstraction. He cannot appreciate the problems that exist and this ends in catastrophe.’⁴⁴

Administrators and directors were expected to encourage the mass of workers to sign up to training courses and Guevara complained when this task was not taken seriously: ‘There are places where training has been taken up with enthusiasm and has advanced more than in other places; that is to say, it makes a difference overnight, but it has not been used enough. We have to give a lot of emphasis to the existing courses, those that are being developed, and to the planning of new courses.’⁴⁵ Workers were informed about education and training courses in *Nuestra Industria*, one of three MININD journals.⁴⁶ As Vice Minister of Technical Development, Tirso Sáenz’s responsibilities included overseeing the training apparatus of MININD. He claimed that he failed in prioritising this task because he prioritised the development of MININD’s research institutes and machinery construction, also under his jurisdiction. ‘The training task was not fulfilled properly. That is one of my self-criticisms.’⁴⁷ MININD’s Annual Report for 1964 stated that

⁴⁴ Guevara, *Bimestrales*, 14 July 1962, 342.

⁴⁵ Guevara, *Bimestrales*, 9 March 1963, 340.

⁴⁶ For example, the January 1963 issue advertised courses at the School of Automation designed ‘to create technicians in automation, industrial instrumentation and mechanical instrumentation’. There were courses at different levels: specialists in automation (28 to 30 months); technicians in instrumentation and electronics (24 months); industrial instrumentation; and mechanical instrumentation. *Nuestra Industria*, Revista de Ministerio de Industrias, Año 3: 1 (Enero 1963), 51-2. Policies to introduce automation to Cuban industry are detailed in chapter 10.

⁴⁷ Sáenz, interview, 2006.

the training had met with difficulties, originating at the national level. In 1964, 41,628 workers were involved in courses for 'technical minimum' and *superación* of workers at different skills levels. More workers were incorporated onto these courses than planned although the graduation rate fell short of the plan, 49-80% down for the *superación* courses (13,281 graduates), 38% for 'technical minimum' (6,385 graduates) and 64% for special courses (3,099 graduates).⁴⁸ Low completion rates for graduations was explained, among other things, by the need to design different programmes for distinct specialities, the absence of specialised workers and technicians to act as instructors, the historical salaries of some workers, untouched by the new salary scale, which undermined the incentive to training.⁴⁹

As well as the work-study courses, seven schools were set up within MININD: for administrators (of production units), directors (of ECs), automation, mechanical drawings; metrology, administrative personnel, and for super-gifted young workers to be fast-tracked to university. 52 Peoples' Schools provided basic education and training for surplus workers, particularly in artisan industries. In addition when a new plant was being built the workers were trained to operate it by Soviets or whoever had sold Cuba the industry. The Cubans were also sent abroad to train in the new technology. Sáenz recorded that in 1963-4, around 16,000 workers graduated in training courses throughout the country, and around 2,000 on courses for plants under construction between 1964 and 1965.⁵⁰ In addition to technical skills, many courses covered political economy and philosophy. Borrego, First Vice Minister of MININD, claimed that by 1963 there was a basic Marxist understanding within MININD:

'We began Marxism courses in the ministry and at enterprise and factory levels. These were obligatory for the leaders, because political economy and Marxist philosophy were included in the administrators' courses,

⁴⁸ *Memoria Anual 1964*, Ministerio de Industrias, Republica de Cuba, 77.

⁴⁹ Details on salary scale below.

⁵⁰ Sáenz, *Ministro*, 205-6.

along with maths, chemistry, Spanish, and so on. Marxism was not obligatory for other courses – it depended on what was studied.⁵¹

Despite the reliance on Soviet manuals for these studies, Guevara constantly fought against the dogmatic approach to Marxism or critical theory that was prevalent in the Soviet bloc. Two anecdotes illustrate the point. When Borrego was being assessed for membership of the Integrated Revolutionary Organisations (ORI) in a meeting in 1962, it was announced that he was a suitable candidate except for committing the indiscipline of reading a Chinese bulletin which members of the old PSP wanted to ban as Cuba was dragged into the Sino-Soviet split. Borrego said: 'Suddenly, Che entered the meeting and asked how everything was. He was told that they were discussing my militancy and the issue of the Chinese bulletin. Che said he hoped they were congratulating me for reading it, as it was the militant's duty to stay informed by reading everything.'⁵² In another incident, members of the Union of Young Communists in MININD complained to Guevara about an ongoing argument with some colleagues who were Trotskyists. Guevara advised them read Trotsky for themselves before continuing the polemic.⁵³ Whilst encouraging theoretical debate, the main concern, however, was to raise the general educational level of administrators to sixth grade: the equivalent of eleven-year-olds in British schools.

SIXTH GRADE EXAMS

'When we initiated this process, in the middle of rapid nationalisation of all the means of production, we could not be selective; but that time has passed and we have seen that one cannot have less than sixth grade [to administrator a production unit]. We still have administrators – some

⁵¹ Borrego, interview, 23 November 2004.

⁵² Borrego Díaz, Orlando. Seminar. *Los pensamientos internacionalistas de Ernesto Che Guevara*, Diplomado: Pensamiento Latinoamericano, Che Guevara. Facultad Latinoamericana de Ciencias Sociales (FLACSO), University of Havana, 18 January 2006.

⁵³ Borrego, *Camino*, 249.

of them very good – who have, sometimes, only second grade and it is incredible how, as soon as they know how to read, write, and do simple maths, they can manage factories. But in the coming year we will be demanding another test from these comrades who demonstrate their capacity for management. Next year, all the administrators of industries should take the exam to accredit them with sixth grade at least. Those comrades who don't have education must return to school to achieve sixth grade. In this way, we will go on demanding more every time.'⁵⁴

Little more than one year after the nationalisations and the frantic search for administrators, MININD was in a position to stipulate that all administrators should pass sixth grade exams. Even university graduates were expected to retake the sixth grade exams. One MININD director, Oscar Bergnes, did not think it was necessary for him to take the exam. Guevara pointed out that he had sat the exam and instructed Bergnes to do so. The pass mark was 70 points; Bergnes got 72 – only just passing.⁵⁵ Despite progress Guevara continued to complain about the low educational level of administrators. In March 1963 he reported that the Ministry of Education had supposedly selected the best graduates with sixth grade from study centres to participate in a special course. In the final exam half of them did not achieve sixth grade: 'The level of sixth grade of our graduates is really at fourth grade', he complained. 'There are people who have a sixth grade certificate but they have lost the knowledge in the course of life; they took the exam 20 years ago.'⁵⁶ Several months later 986 administrators sat an exam at the end of a course organised by the Committees for Local Industry (CILOs); 132 administrators failed and were suspended. Guevara lamented that: 'after all the insistence on reaching sixth grade and the warnings that they would be replaced, despite all this, there were still 132 incapable of passing an exam that is barely sixth grade.'⁵⁷ The pass mark was 60%. Those with less than 50% could not be administrators. Those with 50-60% were sent

⁵⁴ Guevara, 'Discurso en el XI Congreso Nacional Obrero, 20 November 1961, in *Ernesto Che Guevara: Ciencia, Tecnología y Sociedad 1959-1965*, La Habana: Editorial Academia, 2003, 229-230.

⁵⁵ Ángel Arcos Bergnes, interview, 8 December 2004.

⁵⁶ Guevara, *Bimestrales*, July 1962, 341.

⁵⁷ Guevara, *Bimestrales*, August 1963, 363.

to the School of Administrators. If they did not improve they could not be administrators. Guevara announced that 260 administrators had not turned up for the exam. He suggested they stop receiving their salaries until they sit the exam in ten days time, unless they could prove a legitimate excuse for their absence.⁵⁸ In October 1963, Guevara complained that directors were sending weak administrators, who have already been rejected by the School of Administrator, back there. 'We can't be recycling, putting them in the School and taking them out, putting them in and taking them out, playing a stupid little game. Where are the new people?'⁵⁹ Frustrated, Guevara insisted that there are workers, especially youngsters, who have the minimum school qualifications for the role of administrator.⁶⁰

THE SCHOOL FOR ADMINISTRATORS

The school was set up in 1960 under the Department of Industrialisation, transferred to MININD and then opened up to workers from other ministries. Later those ministries organised their own schools. Given the intensity of the School, three years of normal study in one year, candidates had to first pass entrance exams and psychometric tests to prove they could cope.⁶¹ Requirement for enrolment in the School for Administrators was that students had passed sixth grade and were between the ages of 20 and 45 years old. Speaking to the first graduates in December 1961, Guevara said:

'You were enrolled in this School when we realised that the working class, with the education that it had, was going to restrict the development of the productive process if we did not quickly give the directors technical training... you are the first result of this attempt to create technicians.'⁶²

⁵⁸ Guevara, *Bimestrales*, August 1963, 363-4.

⁵⁹ Guevara, *Bimestrales*, 12 October 1963, 406.

⁶⁰ Guevara, *Bimestrales*, October 1963, 407.

⁶¹ Details about the application of psychometric tests in chapter 10.

⁶² Guevara, 'Discurso en la graduación de administradores del MININD', 21 December 1961, in *Tecnología*, 229.

Castellaños was among the emergency administrators allocated to head the newly nationalised industries and later attended the School for Administrators. He recalled: 'We began with numbers and we ended with algebra. In political economy we studied the USSR Manual of Political Economy; we had six months of philosophy, capitalist and socialist accounting, statistics, mathematics, Spanish, physics, chemistry, work organisation and normalisation, and a little history.'⁶³ The students lived at the school and received a monthly salary of 200 pesos of which 25% was held back until they passed. Some of the students had previously earned up to 1,000 pesos; some as little as 80 pesos. Villegas also attended: 'To graduate you had to present a thesis about a factory; describe all aspects from human relations to flows of production, costs, and perspectives plans. I did my thesis about beer production.'⁶⁴ In addition to the curriculum, Villegas recalled that they participated in theatre groups and had to do domestic work.

Of the first 400 students – 100 came from the Ministries of Transport and Domestic Trade and 300 from MININD – 327 graduated. Guevara was disappointed: '300 individuals from a mass of workers that have passed sixth grade and have the necessary conditions to be an administrator: that is not a fabulous sum.'⁶⁵ There were over 1,000 production units in MININD; so the amount of administrators clearly fell short of MININD's needs. Guevara blamed directors for selecting students who lacked the educational level to pass the course: 'I say to you gentleman' he said with the tone of irony he used to castigate his colleagues, 'one cannot study at the School of Administrators with second grade... Sending a man with second grade there will destroy him... we cannot use people in this inhumane way.'⁶⁶ Guevara admitted having sent unqualified youngsters to the school: 'and, after receiving a deficient grade those lads are in tears, and they have come to see me in desperation.'⁶⁷ He believed there were qualified workers who had not been selected for the School, but he warned EC directors not to use the School as a means of getting rid of inadequate administrators: 'The School is not brilliant at all; there are dozens of organisational

⁶³ Castellaños, interview.

⁶⁴ Villegas, interview.

⁶⁵ Guevara, *Bimestrales*, 10 March 1962, 183.

⁶⁶ Guevara, *Bimestrales*, March 1962, 184.

⁶⁷ Guevara, *Bimestrales*, March 1962, 185.

defects. But it is very easy for us to resolve these problems if you send the best people and don't resolve your own problems by sending people to the School of Administrators.'⁶⁸ Graduates were supposed to return to the workplaces from which they had enrolled.⁶⁹

A new intensive school was set up, for people described by MININD's psychology director Dr Graciela del Cueto as 'super-gifted'. They did not have sixth grade but demonstrated a high intellectual ability. The aim was to educate them up to university level in three years.⁷⁰ Guevara highlighted the directors' responsibility to select candidates for this school: 'you all know which are the intelligent youngsters in the factory; truly interested, awake to everything... go pulling out these people and give them a painstaking education; prepare them as cadre.'⁷¹ By February 1964, the EC of Electrics required sixth grade certificates from all its workers.⁷² The workers' general educational standards were rising, but Guevara's expectations rose with them. He aspired to create study circles specific to every branch of industry.⁷³

WORK AS A SOCIAL DUTY

The previous chapter on the Great Debate detailed Guevara's view about the need to decommodify labour in order to undermine the operation of the law of value in the construction of socialism and transition to communism. This section examines how a new concept of social work, breaking the link between work and remuneration, was institutionalised into the MININD apparatus. This was done through negating traditional preoccupations with salary rates, limiting payment over the norm, paying the unemployed to be educated and creating a salary scale which linked qualifications to pay rates and promotions. These measures promoted the notions of a social wage and work as a social duty.

⁶⁸ Guevara, *Bimestrales*, 28 September 1962, 315.

⁶⁹ Guevara, *Bimestrales*, February 1964, 460.

⁷⁰ This was called the Lenin school, but was not the same as today's Lenin school in Havana.

⁷¹ Guevara, *Bimestrales*, October 1963, 408.

⁷² Guevara, *Bimestrales*, February 1964, 461.

⁷³ Guevara, *Bimestrales*, February 1964, 463

Guevara rejected his ministerial salary claiming only the 190-peso monthly wage paid to members of Revolutionary Armed Forces (FAR). MININD cadre followed suit. In 1961, Puñales became administrators of La Modelo brewery, taken from the Bacardi Corporation during the nationalisations. Brewery workers were privileged members of the working class.

‘The first name that appeared on the payroll was mine, followed by the Master Brewer. My salary was 190 pesos, like all the officers of the army, and my subordinate’s 1,000 pesos. The other workers earned 700-900 pesos. For my generation money was not the most important thing. This showed how the workers’ mentality transformed with their incorporation into voluntary labour.’⁷⁴

Guevara defined the work ‘norm’ as: ‘the average amount of labour that creates a product in a certain time, given average skill and under the specific conditions of equipment utilization. It is the contribution of a set amount of labour to society by one of its members. It is the fulfilment of social duty.’⁷⁵ In ministries operating under the Auto-Financing System (AFS) a worker exceeding the norm by 50% would receive a 50% increase in remuneration. Under MININD regulations workers received some additional payment for production over the norm, as material incentives were considered to be a ‘necessary evil’, but not in direct proportion to the amount surpassed. Citing Marx’s *Critique of the Gotha Programme*, Guevara argued that part of the surplus produced by the worker goes to cover investment in social production – new capital goods, expanding production and towards insurance reserves – while another part goes on social consumption; administrative costs, social welfare provision, and provision for those unable to work. Society provided the workers’ education so the worker should contribute back to the society. Workers’ bonus payment could not exceed the basic rate of the next level up on the salary scale. To reach this level workers had to improve their skills and qualifications: ‘Our system of norms has the merit of establishing compulsory professional training as a

⁷⁴ Puñales, interview.

⁷⁵ Guevara, ‘On the budgetary finance system (BFS)’, in *Reader*, 180.

condition for promotion to higher job categories.'⁷⁶ In place of receiving a bonus in proportion to output over the norm, workers were rewarded by their capacity to achieve more capacity. Guevara explained:

'For example, going to a school where one's salary is paid and where one comes out with a new qualification. On returning to the factory this new qualification is automatically converted into an increase in salary. That means that it is a material incentive; the only thing is that the material incentive is not derived directly from the relationship between the work and what is received for the work.'⁷⁷

Along with the attempt to break the link between work and wages there was a more general attempt to break the link between production and commercialisation; for example, by changing the title of the 'Commercial Department' into 'Exchange Department' or 'Delivery Department'. Guevara intended: 'to separate the production, which is one thing, and the commercialisation which is another.'⁷⁸ Production was to be understood as meeting social need, not motivated by the profit motive as under capitalism.

EDUCATING THE UNEMPLOYED

*'A careful analysis of the 1953 census showed that on an annual basis only about 75 percent of the Cuban labour force was employed... For Cuba, in respect to unemployment, every year was like the worst year of [the US's] worst depression. And there was no system of unemployment insurance or unemployment relief.'*⁷⁹

⁷⁶ Guevara, *BFS*, 182. See also Augusto Martínez Sánchez 'La implementación del nuevo sistema salarial en las industrias de Cuba' in *Socialista*, Año 3: 26 (Octubre 1963), 19.

⁷⁷ Guevara, *Bimestrales*, 20 January 1962, 147.

⁷⁸ Guevara, *Bimestrales*, January 1962, 149.

⁷⁹ Huberman *Anatomy* 6-7. Authors' emphasis.

Before 1959 Cuba suffered from endemic unemployment and underemployment. Guevara conceded that tackling unemployment took political priority over raising productivity and efficiency. In late 1960 he called unemployment a cancer of the economy which had to be destroyed and announced that despite the importance of heavy industry in industrialisation, the policy of the Department of Industrialisation had been to develop small manufacturing industries which were more labour intensive, facilitating the employment of more workers.⁸⁰ By the end of 1961 unemployment had been eliminated as a major socio-economic issue. Guevara announced:

‘the revolutionary government has freed itself from one of the great invisible burdens that has weighed it down, to protect industrial development in specific areas where it had to put factories to eliminate major unemployment, excessive in some zones, and specific factories of low productivity that employ a great deal of labour power, precisely in order to employ the greatest number of compañeros.’⁸¹

Guevara turned to the question of productivity, which he argued must be accompanied by a drive to raise the technical level of the population. He repeatedly insisted that the mechanisation and automation of the Cuban economy should not be resisted because of the fear of unemployment.⁸² Guevara argued that superfluous workers represented social unemployment of resources and argued for them to be removed from the workforce and given a salary to acquire technical knowledge. Meanwhile there would be an immediate rise in productivity per worker in the original workplace. This was considered to be an economical solution to the problem of underemployment. In March 1962 Guevara revealed that Soviet advisers had recommended closing the small bakeries in Cuba, replacing them with six big factories, and sending the surplus workers to study, thus freeing them from the inhumane conditions of their work. This would cost almost nothing, he said, other

⁸⁰ Guevara, ‘Comparencia televisada en el programa Ante la Prensa’, 20 October 1960, *Tecnología*, 61-2.

⁸¹ Guevara, ‘discurso en el XI Congreso Nacional Obrero, 20 November 1961, *Tecnología*, 58-59.

⁸² Mechanisation, automation and productivity are discussed in chapter 9.

than the investment into the new factories, as the surplus workers were already being paid a salary. Illustrating the point, he argued that when three people are working on a job which one can do, the surplus workers are effectively unemployed, just like a bureaucrat in a surplus post:

'But if those two workers are removed and given a salary they can live on, given technical training, and the other man works for the three of them, produces for the three, creates a surplus for the three, is not that the same? What more do we have to spend on? The cost of those two comrades studying. Maybe if we lower the salary a little, rationalise the studies, it will work out the same. That means that we have the possibility of training fifty or sixty thousand surplus workers, for no extra cost; for the cost of reorganising work. This is the main proposal.'⁸³

In 1962, thousands of workers were removed from their posts with the rationalisation of small artisan industries which were grouped into large production centres with improved technology. People's Schools were created for these workers, who received a salary to study. In January 1963, Borrego attended the graduation of 5,050 workers from the People's Schools, with Guevara. The workers had qualified in technical courses in various factories in MININD: 'They learned to make parts and equipment for use in the new industries.'⁸⁴ Guevara announced that the future generation of technicians would study in the technological institutes and schools which the Revolution was creating. In total 52 People's Schools were set up by MININD.⁸⁵

In May 1964 Guevara proposed that workers in factories who had temporarily stopped work because of a lack of raw materials should continue to receive 100% of their salaries with the obligation to study, thus maintaining them and raising skills levels.⁸⁶ The possibility of dividing the year between six months of production and

⁸³ Guevara, *Bimestrales*, March 1962, 228-10.

⁸⁴ Borrego, *Camino*, 312-3.

⁸⁵ Sáenz, interview, 2006.

⁸⁶ Guevara, *Bimestrales*, 9 May 1964, 481-2.

six months of training was suggested for the EC of Soaps and Perfumes and the EC of Pharmaceuticals and several others. This solution, Guevara said, needed to be studied further, but it was better than reducing workers' salaries.⁸⁷ The production stoppages were the result of raw material shortages following the imposition of the US blockade and the shift in trade.

Guevara's policy of training the unemployed attempted to reconcile two seemingly contradictory objectives; eliminating unemployment and raising productivity. As has been demonstrated, for Guevara education and training were not just personal choices motivated by individual material incentives, but rather social choices, motivated by indirect material incentives, for the benefit of society. For Guevara, surplus workers were unproductive for society, while students had the potential to improve the efficiency of the productive forces.

SALARIES

The problem of salaries was a concern for the entire revolutionary government. There are complex links between salaries, trade unions, workers' incentives, absenteeism, unemployment, the need for skilled workers, economic development policy and inflation. The discussion about salaries took place in the context of growing social welfare provision, expanding free education and healthcare, massive reduction of rent and utility bills, universal rations of basic foodstuffs, and mixed ownership of the means of production. Government measures to freeze the prices of basic commodities and salaries in state-owned enterprises were undermined by the action of the private enterprise which remained in Cuba, which could pay workers more or sell produce for less than the state. Given all these contradictory forces, the process of devising a new salary scale was a major challenge in which Guevara was involved for years in cooperation with the Ministry of Labour. According to Borrego, who assisted Guevara to formulate the new salary scale: 'Che was very agitated by the delay in producing the new salary scale. It was very difficult. We needed to

⁸⁷ Guevara, *Bimestrales*, May 1964, 482.

discuss with the trade union leaders to convince them about the scale.'⁸⁸ Guevara felt that the BFS was incomplete as an economic management system until the salary scale was introduced in 1964. The salary scale was a vital component of Guevara's solution to the decommodification of labour which was pivotal to the BFS. It is detailed below, following a discussion of the background to its formulation.

CONTROLLING DEMAND; CONTROLLING INFLATION

As president of the National Bank, it is not surprising that as early as 1960 Guevara expressed concern about inflation and its effect on national development strategy:

'We have to struggle hard against a rise in salaries, because a rise in salaries means one man less can be employed. The capital of a country is one whole, and we cannot create it with a little machine, this is false. The more money we create, the less value this money has.'⁸⁹

The bimonthly meeting of March 1962 was dominated by the issue of salaries: apprentices who were awaiting salary rises; pay variations between factories involved in similar production; salaries changing or staying the same when workers were transferred. When Guevara asked the directors if the workers would accept a new pay scale, EC director Miguel Dominguez, replied: 'they are waiting for it like crazy.'⁹⁰ Another director, Manuel Malmierca, insisted that 'the most serious problem that we have today is the salary; this is undeniable'. He recommended this be prioritised.⁹¹ Guevara responded to this challenge by explaining that increasing money supply leads to inflation, unless there is an increase in production:

'What is money if not a commodity that serves to acquire other commodities?... What does it matter if a man earns \$1,000 monthly if he

⁸⁸ Borrego, interview, 23 November 2004.

⁸⁹ Guevara, 'Discurso a la clase obrera', 14 June 1960, *Tecnología*, 58.

⁹⁰ Miguel Dominguez, *Bimestrales*, March 1962, 195.

⁹¹ Manuel Malmierca, *Bimestrales*, March 1962, 197.

cannot spend it?... We cannot inject a mass of money into circulation if we do not have the products on which to spend the money; this is elemental. We are working towards raising the salaries. Well, we can raise them, as high as you want... I have seen it in Bolivia, where you have to pull out \$140 to pay for a coffee, magnificent! You go to the bank and withdraw a bag of ten or a hundred thousand pesos to buy four things. That means the amount of money that you earn does not mean anything, the question is the amount of products that the money can buy.⁹²

Guevara urged directors to get to the root of the issue in discussions with the workers themselves. He pointed out that many problems had been created through mistakes made by the revolutionary government: employing people who produced nothing; creating a formidable bureaucracy; badly conceived investments; sumptuous expenditures. Consequently, the population had eaten all the food produced in Cuba, from cows to *malanga*.⁹³ The solution was not just to level salaries. The problem had to be confronted through discussion; with the trade unions, in the workers' assemblies: 'We are to blame and that must be said honestly. What will happen? The working class wants to condemn us for this? Man, let them condemn us, let them change us; let them shoot us, do whatever. But the problem is still here.'⁹⁴ Nonetheless, Guevara concluded optimistically that through discussion, coordination and a little patience a solution will be found within two months.⁹⁵ Real salaries were falling because private businesses were raising prices and the wage increases won by trade unions or offered by private employees were creating inflation. Cuban economist Carlos Tablada explained that: 'the bourgeoisie followed a policy of increasing wages, either out of fear of conflicts that might result in intervention by the revolutionary government or to destabilize the economy through inflation.'⁹⁶

⁹² Guevara, *Bimestrales*, March 1962, 202.

⁹³ Guevara, *Bimestrales*, March 1962, 203.

⁹⁴ Guevara, *Bimestrales*, March 1962, 203.

⁹⁵ Guevara, *Bimestrales*, March 1962, 221.

⁹⁶ Carlos Tablada, *Che Guevara: Economics and Politics in the Transition to Socialism*, New York: Pathfinder, 1990, 179.

EC Director, Pedro Pastor, said workers had demonstrated that they were prepared to make sacrifices, but that they did not understand the salary variations between workplaces and between ministries. Holiday pay, for example, was paid in some enterprises, not others. Director of the EC of Cement, Ramírez pointed out a discrepancy between his enterprise's policy on sick pay and the revolutionary government's new law: 'we are paying people in full, but the law, which is retroactive from the 15 February, says that we should pay them half.'⁹⁷ Guevara instructed him to follow the law. A third EC director pointed out that workers who suffer work accidents are paid half, while those off sick are paid in full, including absentees who are not really unwell. Before the Revolution many workers paid 2% of their salaries to a private insurance company that no longer operated in Cuba. Ramírez called for the abolition of the 2% deduction, as the EC was in no position to offer a payout which would now be additional to state provision.⁹⁸ Pastor complained that the factory nuclei, the groups of workers elected as a vanguard in each production unit, were failing to comply with the ministry regulations on salaries: 'There are cases that the factory nucleus themselves are asking for a salary increase, people who are supposed to struggle against this are creating the problems. This is happening because even the nucleuses are not clear.'⁹⁹

Inflation was around 6%, but Guevara understood that this meant a wage freeze was unsustainable without political consequences and that minimum salaries would have to be reconsidered.

'...we cannot have an anti-worker policy, when there is still a middle class, a petit-bourgeoisie. It is the land-owning bourgeoisie in reality that is gaining; and a class of intermediaries that is winning fabulous dividends, in the buying and selling of commodities. And we are going to say "no, comrades, here the salaries are frozen, everything is frozen". The people will say: "frozen?" "Everything frozen, when shoes cost double, when clothes cost double, when there is no malanga and when

⁹⁷ Ramírez, *Bimestrales*, March 1962, 247.

⁹⁸ Ramírez, *Bimestrales*, March 1962, 248.

⁹⁹ Pastor, *Bimestrales*, March 1962, 231.

there is some it costs so much?"... [The salary freeze] brings conflict with certain sectors of the working class, but it is a measure taken to defend the working class; because the inflationary process, comrades, is the most tragic process that a country can experience, from the point of view of development and of social harmony. The Argentinians know this well; as do the Chileans, I don't know if there are any here, they know this better; the Uruguayans also know this; and it is a thing of complete disruption and a terrible mess.¹⁰⁰

Inflation, the result of goods scarcities, the fall in production and productivity and the manipulation of prices by private enterprises, demonstrates how the mixed economy, with minimum private ownership, was an obstacle to socialist construction. This contradiction was largely overcome with the Revolutionary Offensive of 1968 which nationalised the remaining businesses in Cuba. In 1962, however, the challenge was for the revolutionary government, Guevara asserted, was to maintain the salary freeze whilst the payroll was restructured and applied. This meant constant interaction with the trade unions and workers' assemblies.

In 1963 salaries and training were two of the four issues prioritised for the year in MININD.¹⁰¹ That year, Ángel Arcos Bergnes, MININD's director of personnel and a member of management council, criticised the *de facto* salary policy because workers could pass up to higher scale just on the decision of the director. Outlining the need for some objective method to assess workers' qualification for promotion, Arcos pointed out that he had received only six negative reports from a workforce of 1,000, which did not realistically reflect the quality of the workers. Guevara agreed on the grounds that he would never write anything bad about his personal secretary, José Manresa.¹⁰² The new payroll scale did use independent criteria for promotion decisions; a skills upgrade was the precondition for a rise in salary.

¹⁰⁰ Guevara, *Bimestrales*, July 1962, 277.

¹⁰¹ After July 1962 the question of salaries and inflation were raised much less in the bimonthly meetings, suggesting that the urgency of the issue had abated as ECs established the norms and pay scales.

¹⁰² Arcos, interview, 2004.

In October 1963, an article by Labour Minister, Augusto Martínez Sánchez detailed the new salary scale and the results of a pilot survey in which the new system had been applied in 247 work centres under different ministries, including the most economically significant in the country, effecting 40,000 employees. The pilot plan had resulted in an increase in production of 9.2% and in productivity of 17.4%. The most significant improvements were in the Ministry of Construction which saw a 39.2% increase in production and a 56.2% increase in productivity. The National Institute of Agrarian Reform (INRA) improved 19% in both categories and MININD 5.2% in production and 14.3% in productivity.¹⁰³ The salary scale is detailed below. Sánchez concluded that it was indispensable to apply the salary scale in all work centres. Still by February 1964 the salary scale had still not been implemented. Guevara warned that this would create more problems and said that the work norms had to be applied and the salaries categorised in every workplace within one month:

‘...otherwise we are going to have another year of tricking the workers, of asking for more time, of tense Assemblies because the people feel deceived by our continuous offers. The plan was that from the 31 December they were going to have many of the enterprises operating with norms and now the majority will have norms by the 31 March. The plan is very behind.’¹⁰⁴

Finally the salary scale was implemented throughout the economy and in May 1964 the Council of Ministers proposed that workers not active on production receive 50% of their salary.¹⁰⁵ These achievements signalled moves to universalise work norms and pay, consistent with the concept of work as a social duty under socialism. Sánchez had complained about weak trade unions which had not assisted in the ideological work necessary with the mass of workers in order to introduce the salary scale with their support. Trade unions had not understood the revolutionary character

¹⁰³ Martínez, *Implementación*, 19.

¹⁰⁴ Guevara, *Bimestrales*, February 1964, 346.

¹⁰⁵ Guevara, *Bimestrales*, 9 May 1964, 483-4.

of that plan, he complained.¹⁰⁶ They were stuck in old economist patterns of behaviour.

TRADE UNIONS AND 'ECONOMISM'

'There was a negative tendency in trade unions led by old union leaders who, at the triumph of the Revolution, used the fact that this was a Revolution of the workers to obtain in a disorganised and, it could even be said, ruthless way, big salaries that did not correspond with the economy of the country. These economic tendencies infiltrated the workers' ranks so the Revolution was seen only in terms of how much they earn and how much more they want to earn, without analysing how the Revolution should be made and how much it costs; ruining consciousness by taking a syndicalist position as if the state were just a foolish big boss from whom they had to get the most out that they could.'¹⁰⁷

Faure Chomón Mediavilla became leader of the Revolutionary Directorate in the struggle against Batista, the group's leader José Antonio Echevarría was killed in 1957. In 1963 he was given the task of debating these issues with the trade union movement. In reality, Faure's task meant reorganising the union leadership, pushing for the election of new cadre. He said these measures: 'defeated the [economistic] line which affected productivity, encouraged indiscipline and crude customs in the workers' relationships', insisting that: 'The Revolution never imposed a change that was not discussed in the Production Assemblies by the workers.'¹⁰⁸

This thesis cannot detail the history of the Cuban trade union movement, except to assert that the militancy of organised labour, under the influence of anarchists and

¹⁰⁶ Martínez, *Implementación*, 21-2.

¹⁰⁷ Faure Chomón Mediavilla, interview, 16 February 2005.

¹⁰⁸ Chomón, interview.

communists from the early 19th century had abated into economism and co-option by the mid-1940s under the Autentico government. This was largely achieved by the targeted repression and murder of radical trade union leaders. However, as a result of authoritarian cooperativism, some sections of workers were granted significant improvements in salaries and conditions which entrenched economistic tendencies within the trade union apparatus. Eusebio Mujal, head of the Cuban Workers Confederation (CTC), responded to Batista's coup in March 1952 with cooperation and complicity. There were notable exceptions – transport workers, bank clerks, port workers and sugar cane workers – who organised strikes in the 1950s without official CTC support. During the 1950s the revolutionary organisations built up alternative labour organisations culminating in the launch of the National Workers Confederation in late 1958. The shell of a class conscious, revolutionary trade union apparatus had been set up. However, old trade union leaders still had to be won over to the role assigned them by the new regime; working within the paradigm of the Revolution in the interests of the whole working class, not promoting sectoral interests from the margins.¹⁰⁹ Fidel Castro told the trade unions that they should not be struggling for crumbs, but to take power.¹¹⁰

Guevara recognised the need to honour existing salaries, which often reflected trade union victories after years of struggle to defend their workers. Trade unions held on to outstanding agreements and insisted that they be honoured by the Revolution. In the MININD meeting of March 1962, Malmierca complained to Guevara that:

‘The trade union has fought with us every time there’s been a problem in the factory... Problems have been resolved by talking of the “country or death”, of Fidel, of Che and of every one else... This is because the trade unions have wage rates; they have wage agreements and they demand they are met. We say we are going to meet the agreements: then “No we won’t complete the agreements”.’¹¹¹

¹⁰⁹ Helen Yaffe, *From Student Protest to Revolution: The movement against Batista, 1950s Cuba*. MSc dissertation. London School of Economics, 2002.

¹¹⁰ Cited by Borrego *Camino*, 191.

¹¹¹ Malmierca, *Bimestrales*, March 1962, 197-8.

Clearly some administrators did not refuse the economic demands of trade unions. In July 1962, Guevara complained that production units were raising salaries despite the order to freeze them until the new salary scale was devised. This was a 'suicidal' mistake. At the same time, he said, they could not reduce salaries: 'the masses have not even remotely reached the level of development that would permit the abandonment of what they have won over the years what was evidently given to them by the bosses, in their old relationships.'¹¹²

Guevara's own approach to trade unions in socialist construction was radical and dialectic. In July 1961 he outlined two distinct functions for the unions: to promote the goals of the government with the workers and to defend the specific and immediate interests of the working class at the production level. These were not contradictions, but complementary, he asserted, giving the example of trade unions which intervene on the workers' behalf to demand improvements in the conditions of an unhealthy job in response to a government directive to double production:

'The establishment of the socialist system does not liquidate class contradictions but it alters the way of solving them. Now also, there will be contradictions and in this the trade unions will play an important role; they will establish the points of view of a given sector of workers when their necessities are possible to satisfy without damaging the general interests of the mass of the working class; the construction of socialism and industrialisation of the country in a short period...'¹¹³

Although this was not a regulation, Guevara recommended that trade union leaders were incorporated into the management councils of production units in MININD. Close contact between the administrator and the trade union representative would provide a clearer picture of the state of consciousness of the workers, and of the economic objectives of the management: 'The trade unions are intimately linked to a rise in productivity and to work discipline, two pillars in the construction of

¹¹² Guevara, *Bimestrales*, July 1962, 267-8.

¹¹³ Guevara, 'Discusión colectiva; decisión y responsabilidades únicas' in *Ernesto Che Guevara, Obras 1957-1967*, Tomo 2, La Habana: Casa de Las Americas, 1970, 123-4.

socialism; and in the education of administrators from among the workers, raising their general political and technical level.¹¹⁴ The administrator and union representative should cooperate: the former responsible for administration; the latter for the ideological improvement of the masses. Contradictions must be resolved through discussion: 'because the superior weapon of the working class, the strike, is precisely the weapon of the violent definition of class contradictions, which cannot occur in a society on the path towards socialism.'¹¹⁵ Guevara concluded optimistically that this was not a problem and that trade unions were leading and directing workers' participation in voluntary labour. This was certainly the case in MININD.¹¹⁶

In July 1962 Guevara urged MININD directors to read Lenin's *The State and Revolution* which demonstrated that trade unions would be destroyed along with class antagonisms as the state withered away. He complained that post-1959 trade unions were mechanical and administrative because they were based on the trade union model in the USSR. Copying was not Marxist, he stated, claiming responsibility for this mistake, along with the Council of Ministers.¹¹⁷ MININD's *Manual for Factory Administrators* published in June 1964, asserted the workers' rights to trade union representation and the administrator's responsibility to coordinate with the unions.¹¹⁸

In the final bimonthly meeting of MININD, Guevara stated that, contrary to his earlier incorrect assertion, the administrator *was* a political leader, not just a bureaucrat. Trade unions, on the other hand, were associations of workers organised against the patron; a product of class war. As the means of production went into the hands of society the class contradictions disappeared and trade unions had no reason to exist. For now, contradictions remained and new means had to be found to resolve them. Workers who became administrators did not become enemies of the working class, but contradictions remained or else trade unions would have already

¹¹⁴ Guevara, *Discusión*, 125-26.

¹¹⁵ Guevara, *Discusión*, 126.

¹¹⁶ Details in chapter 10.

¹¹⁷ Guevara, *Bimestrales*, July 1962, 272.

¹¹⁸ *Manual for Factory Administrators*, MININD, 4, 3 & 5, 17, 2 & 5, 17, 4.

disappeared. He mentioned the new Commissions for Labour Justice as a possible first step to resolving those contradictions; where administrators and workers coordinated together.¹¹⁹ Created in 1963 by the Ministry of Labour and the CTC to tackle the problems associated with salaries, the Commissions were made up from workers selected to liaise with administrators. Borrego recalls that Guevara believed these were important and effective. He explained their role:

‘These workers attended seminars about labour justice to learn the laws and defend the workers. When there was a problem, for example a case of indiscipline, those on the Commissions were consulted on the law to assess what punishment should be applied. The Commissions received legal advice. They aired problems about the norms of work protection, for example, and anything else that could arise in a work centre which effected production.’¹²⁰

Guevara said the workers were enthusiastic about selecting their representatives for the Commissions which was better than the questionable democracy of trade union representation: ‘The Party meets and proposes to the masses that “so-and-so” is the only candidate and then they are selected... in reality without a selection process of the masses.’ If a real selection process had been involved, the workers would have shown their enthusiasm, he claimed. If these Commissions are capable of winning the confidence of the people, they would be more suitable than the trade unions in representing the interests of administrative workers, in the general problems of the entity. This would allow the elimination of the trade unions, in name and in all aspects of class antagonisms, and at the same time it would create a necessary democratic vehicle for the new institutions being created: ‘In this moment I would even say that the trade unions could already stop existing... and transfer their functions to the Commission for Labour Justice, which would combine some concrete tasks, and whose members would be chosen.’¹²¹ Guevara was confident that everyone would agree with him, except for the union bureaucracies. He concluded

¹¹⁹ Guevara, *Bimestrales*, 5 December 1964, 578-9.

¹²⁰ Borrego, interview, 15 March 2006.

¹²¹ Guevara, *Bimestrales*, December 1964, 579.

that the issue of trade unions had to be discussed and resolved in a proper manner without offending the feelings or interests of *compañeros*.¹²² This discussion demonstrates how Guevara's education in Marxist-Leninist theory impacted upon his approach to the institutional apparatus which should be adopted in transition to socialism. He understood that moving towards communism meant overcoming class antagonism to create a society where production is organised as in one big factory, determined by the plan which was made democratically through workers' discussion.

NEW SALARY SCALE

'We inherited from capitalism an enormous quantity and variety of different wage rates for the same skills. As you know, under capitalism wage rates are a product of the sale of labour power and are influenced by the class struggle. In addition, as a semi colonial country dominated by US imperialism, Cuba was once a field of investment for the US manufacturing industry. Wage rates in the US-owned workplaces were much higher than previously known in Cuba, despite being much lower than what workers in the United States would receive for the same work. All this made the wage question more complex and increased the number of wage differentials. We have calculated there were some 90,000 different wage rates in Cuba and some 25,000 different job categories based on skill levels.'¹²³

Cuban economist Carlos Tablada underlined the complexity of the task undertaken in designing a new salary scale: 'drawing up a list of job descriptions and skill requirements for each job; and evaluating, from the standpoint of complexity, more than 10,634 occupations, dividing them into 340 categories based on skill level... reorganizing thousands of different wage rates into a total of 41 for the entire

¹²² Guevara, *Bimestrales*, December 1964, 581.

¹²³ Guevara, 'Participación en programa televisado Acerca de la implantación de Normas de Trabajo y Escala Salarial en Los Sectores Industriales' in *Ernesto Che Guevara: Escritos y Discursos*: tomo 7, La Habana: Ciencias Sociales, 1977, 163-164.

economy.'¹²⁴ After two years work, with a national salary freeze in place, and with the results of a pilot test, the scale was introduced nationally in 1964. Labour Minister Sánchez outlined the key points of the new salary scale: current incomes would be respected; workers had to improve their qualifications; work norms were established in every work centre; workers were paid according to the norm with limited bonuses for over-completion and a proportion withheld for under-completion, rates were higher for dangerous work. In addition to eliminating the divisive and anarchic payroll inherited from the capitalist era, the new scale was necessary because: 'we can't organise the socialist economy without organising the salaries, in accordance with the socialist principles of distribution.'¹²⁵

The salary scale comprised three elements: grouping of wage rates; established tariffs for each group; categorisations of every employment into the groups, accompanied by the establishment of work norms.¹²⁶ The salary scale had eight hourly wage rates with 15% differential between them, reflecting a rise in complexity, worked out on the basis of coefficients of the simplest employment. Those who worked in harmful conditions received 20% over the base rate; those in dangerous conditions an extra 35%. Completing the norm established for each task was the precondition to receiving the full salary. Workers could receive a bonus for over completion but this could never make their salary greater than the base rate of the next level up; that is 15%. Of that bonus payment; 50% was paid to the worker, and 50% to the state. To avoid reducing any worker's income in the process of implementing the new scale, those who were currently receiving a salary higher than that corresponding to their categorisation had their salary split into two parts; basic salary and historical salary actually received. For example, if the worker received 8 pesos per day, but the daily salary corresponding to their categorisation was 5 pesos, their salary would be configured as 5 plus 3; where 5 is the basic wage and 3 the historical wage. However, when they passed on to a higher wage rate, or when there was a salary rise, their total salary would still only reach 8 pesos, for example, 6 plus 2, until the point

¹²⁴ Tablada, *Transition*, 180.

¹²⁵ Martínez, *Implementación*, 9-10.

¹²⁶ Martínez, *Implementación*, 10-11.

where their basic salary was equal to the historical salary and then they would be fully incorporated onto the national scale, without overhanging remnants from the previous capitalist system. As old workers retired and a new workforce was incorporated on the basic rates, the wage fund would decrease, thus increasing the productivity of labour. By not slashing existing salaries the Revolution avoided another exodus of skilled workers. Rather than lowering the wages of those in the top bracket the idea was to raise the salaries of those in the lowest income brackets to decrease inequalities. Castro explained: 'The Revolution cannot equalize incomes overnight. The Revolution's aspiration is to arrive at equal incomes starting from the bottom up, not from the top down. It would be incorrect to do it the other way.'¹²⁷

Salary scale: categories and wage rates:¹²⁸

Category							
I	II	III	IV	V	VI	VII	VIII
0.48	0.56	0.65	0.76	0.89	1.05	1.23	1.49

Hourly wage rate in peso.

The tariff for the first group, 48 centavos was to reflect the first significant concentration of workers' wages. 19.11% of Cuban received 45 to 49 centavos. It was consistent with the minimum salary established by the government of 85 pesos monthly. To pass up into a higher bracket workers had to gain higher qualifications through training. Sáñez explained:

'If you are a mechanic of a certain level, regardless of your industry you receive the same salary as your colleagues. If you want a higher salary you have to study. If you are a mechanic B, you have to train to be a mechanic A to get a pay increase. This idea couldn't be implemented without ideological support, because to practice Che's ideas it was

¹²⁷ Fidel Castro, 'To create wealth with social conscience', in Silverman, Bertram (ed) *Man and socialism in Cuba: The Great Debate*, New York: Antheneum, 1971, 368.

¹²⁸ See Martínez *Implementación* for details of the wage scale. Tablada, *Transition* & Roberto Bernardo *The Theory of Moral Incentives in Cuba*. Alabama: University of Alabama Press, 1971, also have details about the salary scale.

necessary to have the ideological support of the working class, of the managers too, the enterprise directors and so on.'¹²⁹

The scale also got rid of piecework, which was considered to be a brake on technological development, particularly in employment where technical norms could not be established. Sánchez explained: 'Furthermore, piecework in general foments the material interest of the worker in the increase of their private yields, independent of the results of social production. This supports individuals and separates the workers from the collective interest'.¹³⁰ Interestingly, at INRA, where piecework payment was most applied, the results of the pilot study in terms of production and productivity were by far the best. By the end of 1964 the new payroll, norms and salary scale, had been implemented in all 1,753 MININD work centres, affecting all 110,081 employees. As a result the average salary increased by 5.2% and production per worker rose 21.7%, reducing the salary-cost of production by 19 cents per \$1. 71% of MININD's non-administrative workers (69,613 out of a total workforce of 98,206) and 61% of administrative workers (7,183 out of 11,875) were placed in the lowest three skills brackets, salary groups I to III, which illustrates the low skills level of the population as a whole.

In 1965, on return from leading an expedition of soldiers to the French Congo, Jorge Risquet replaced Sánchez as Minister of Labour, responsible for implementing the salary scale. He recalled:

'I spent several years applying this scale. It took a lot of work. The scale was too narrow; it was difficult to place thousands of trades into only eight subdivisions. The workers accepted it fine because if they earned low salaries, their income was raised, and if they earned higher salaries, their income maintained. The problem was with the over-completion of the norm; 50% went to the worker and 50% went to the state. I remember

¹²⁹ Sáenz, interview, 2005.

¹³⁰ Martínez *Implementación*, 14-15.

in one meeting with the Dockers' Union the workers said to me that they felt a lot of respect for Che, but that they did not understand the scale.'¹³¹

According to Risquet, the dock workers objected to handing over half their bonus to the state therefore the new scale was never applied to the ports. Guevara argued that if everyone went 30% over the norm, the norm itself should be revised. In Risquet's opinion this became a brake on productivity. The salary scale was adjusted in 1976, but remained as a general concept until 1989. Given the phenomenal advance in education and training in Cuba the main function of the scale, to promote skills training and qualifications was no longer a priority.¹³²

According to Roberto Bernardo's study of the theory of incentives in Cuba: 'The Cuban and Chinese view of the debate on incentives is that the test of whether a society relies primarily on moral incentives is found in the extent to which it has abolished the market wages system – where labor is allocated like any other commodity.'¹³³ He concluded that since 1966, both countries had eliminated the labour market. Clearly, wages were no longer determined by the law of value operating through a market where labour power was sold as any other commodity. It was a step towards the decommodification of labour which Guevara pursued. Remuneration was still determined on the basis of work done, according to an established norm. This was consistent with what Marx, in the *Critique of the Gotha Programme* described as 'bourgeois right', the distribution of the social product during transition according to work done; still a long way off from communist distribution 'from each according to his ability, to each according to his needs'. However, the narrow pay categories which Risquet complained about began a process of converging salaries, equalising the material conditions of Cubans: a precondition for harmonising the material and political interests of workers. Furthermore, wage differentials did not translate into equivalent consumption differentials because of the effect of rationing, social provision and the scarcity of consumer goods for sale; all of which acted as a wealth equaliser.

¹³¹ Jorge Risquet, interview, 8 February 2005.

¹³² Alfredo González Gutiérrez, interview, 27 December 2004.

¹³³ Bernardo, *Incentives*, vii.

CONCLUSION

Forced to confront the scarcity of technical and administrative personnel, Guevara developed an apparatus to institutionalise the national educational drive, first within the Department of Industrialisation and then in MININD. It served three functions simultaneously: education as culture, political education and education for production. Classrooms and study circles were established throughout MININD production units and by the political organisations within MININD. Skills training and qualifications were promoted via the material incentive of the salary scale, by embedding the concept of *superación* and with the use of administrative control mechanisms: sixth grade exams; the school of administrators; directors' exams in the bimonthly meetings; education for unemployed and underemployed workers. In addition, Guevara constantly sought mechanisms to break the link between work and remuneration at the heart of the capitalist mode of production and, by undermining the operation of the law of value in labour allocation, began a process of decommodifying labour. Education and training meant self-improvement which in turn meant social development, improving the productivity and efficiency of the productive forces necessary for the transition to socialism. Education was political; politics was revolution; revolution was *Cuba Socialista*. These were processes underway throughout the island but they were exemplified in MININD. As Maria Teresa Sánchez said: 'If there was a ministry where the people were politicised it was MININD.'¹³⁴ The mechanisms described above became key elements of Guevara's BFS and integral to his conception of socialist transition.

¹³⁴ Sánchez, interview.

CHAPTER 7

Administrative control, supervision and investment

*'Che devoted absolute, total, priority attention to accounting, to analyzing expenditures and costs, cent by cent. Che could not conceive of building socialism and running the economy without proper organization, efficient control, and strict accounting of every cent. Che could not perceive of development without an increase in labour productivity. He even studied mathematics to use mathematical formulas for economic checks and to measure the efficiency of the economy. What's more, Che even dreamed of computers being used in running the economy as a key factor to measure efficiency under socialism.'*¹

In Guevara's analysis: 'The law of value and planning are two terms linked by a contradiction and its resolution.'² While supporters of the Auto-Financing System (AFS) argued that the law of value could be expressed through the plan, Guevara did not.³ Planning was the product of the conscious organisation of the national economy in pursuit of political objectives. He perceived the plan as a social contract, a democratic product devised through workers' discussions. However, once the plan was agreed, mechanisms had to be in place to ensure its fulfilment. These mechanisms constituted administrative control and should include computerised accounts procedures to relay information in real time. To prevent planning from being undermined by capitalist mechanisms it must be accompanied by an apparatus which has moved away from what Guevara called 'financial compulsion': the profit motive. This chapter examines the policies formulated in the Ministry of Industries

¹ Fidel Castro, 'Speech by Fidel Castro on October 8, 1987' in David Deutschmann (ed) *Che: A Memoir by Fidel Castro*, Australia: Ocean Press, 1994, 153.

² Guevara, 'On the Budgetary Finance System' in Bertram Silverman (ed), *Man and Socialism in Cuba: The Debate*. New York: Atheneum, 1971, 143.

³ See chapter 5.

(MININD): to foster administrative control of industry and to raise the accounting and administrative skills levels necessary for this control among the new administrators, along with the ministry structures implemented in order to monitor their progress and secure resources. It also details Guevara's insistence that the most advanced administrative techniques be adapted from capitalism, without relying on financial and material incentives which destroyed a sense of collective ownership and responsibility for production.

What stands out is the significant gulf between Guevara's ambitious ideas for attaining administrative control: automated accounts in real time, advanced management techniques, total inventory control, comprehensive economic analysis, decentralised investments and quality controls; and the disorder which prevailed when he took over industrialisation: the absence of basic statistical knowledge and manual accounts, financial indiscipline, and a lack of control at all levels. Guevara's approach was to encourage learning by doing, push for analysis and, as part of a dynamic search for solutions, work with all available experts, aspiring to the most advanced technology and laying the groundwork for future advances even while struggling to overcome present backwardness. He had a flexible approach to questions of control, decentralising to encourage initiative and centralising to ensure control. The examination of the apparatus developed reveals a weakness in the ministry in its dependence on Guevara and a few other key individuals, to personally highlight and resolve daily problems in administrative control, supervision and investments.

LACK OF ACCOUNTANTS AND SUPERVISORS

A huge proportion of accountants joined the exodus of professionals from Cuba in the first two years of the Revolution: of 1,200 certified public accountants, 800 (66%) left the country.⁴ In addition, professional expertise was concentrated in Havana, particularly in the sugar industry, which dominated the Cuban economy.

⁴ Ángel Arcos Bergnes, interview, 30 March 2006.

The accountancy knowledge in the mainly Cuban and Spanish mills in the east of the country was basic, their balance of accounts were organised from Havana, with book-keepers in the provinces sending receipts to the capital.⁵ The modern sugar mills in the Oriente province in the east were US properties staffed by US managers, accountants and technicians. The rest of the advanced mills were in Camagüey, in central-eastern Cuba. On nationalising the sugar industry the decision was taken to decentralise accounting control so that workers would know the results of production. Before 1959 Ángel Arcos Bergnes worked as an auditor with a US corporation which owned three sugar mills. He also worked with the 26 July Movement (M26J) in support of the Revolution. In 1960 he was named General Auditor of the sugar industry in Camagüey, with 24 mills. In 1961, Oriente was added to his portfolio with 40 mills and in 1962 La Villas province with 52 mills. In late 1962 he was transferred to MININD in Havana as General Auditor of the 161 mills in Cuba and 50 related units from refineries to distilleries. Following the nationalisations, Arcos' responsibilities were to facilitate this decentralisation of accounting procedures, to convert the accounting system used from one appropriate to capitalism to one necessary for socialist planning, to ensure uniformity among mills, to group them by size and to audit their accounts. He was unable to dedicate himself to the task of auditor, he said, given the scale of his other tasks:⁶

'In this moment 90% of our work was to normalise the accounting system everywhere. The North Americans had very advanced accounting but the Cubans and Spanish was very bad. I would go to a mill at 2am and call another one to say that I would arrive at 5am. In every one I met with all the economic personnel and discussed their doubts about the new socialist accounts. I had a group of auditors in every province. Many weren't very revolutionary, but they did the work; others left. One auditor in Oriente was formidable, but he left because he didn't agree with communism.'⁷

⁵ The term 'sugar mill' is used here generically to refer to both *ingenios* (smaller mills) and *centrales* (larger, more industrial mills).

⁶ Arcos, interview, 2006.

⁷ Arcos, interview, 2006.

The task was further complicated by the need to travel armed, because bandits sometimes shot at him and because of the difficulty in persuading accountants from Havana to take up work in the provinces. As the mill professionals left, however, the Revolution expropriated their houses and offered them rent free as an incentive to the *Habaneros* to move to the country. Edison Velázquez was the head of the Section of Inspection, Investigation and Audits within the Department of Industrialisation. He was also involved in searching for the best accountants in Havana for the Department's new acquisitions.⁸

Chapter 4 has described the frantic search for new administrators for the nationalised industries. The absolute priority was to keep production going or the Revolution would collapse into chaos. Alexis Codina, studied in the School of Commerce after the Revolution and in 1961 became the head of accounts at the large Consolidated Enterprise of Flour in MININD. He explained:

'When the Revolution triumphed it was most important to give food to the people. As an accountant I had to argue with people to establish controls. For example the flour arrived at the port and they took it out urgently, but no-one was concerned about the values, there was no economic culture... When you make a plan you start by compiling information about what you consumed, how much it cost you, and so on. In that moment there were no statistics. I visited enterprises where there was no accounting. The statistical base was very important in my work, but there was no tradition of registering accounts.'⁹

The scarcity of revolutionaries with accountancy training impelled the formulation of mechanisms to push those in charge of production to study and learn on the job. Orlando Borrego, who became First Vice Minister to Guevara, rose to such a prominent position because he was a revolutionary combatant with basic accountancy training: 'I had no aspirations to hold any position of this type. I just

⁸ Edison Velázquez, interview, 19 January 2006

⁹ Alexis Codina Jiménez, interview, 27 January 2005.

knew accounting and Che asked me to help him in the economic aspect first in La Cabaña and after in the Department of Industrialisation.’¹⁰ In 1962, Jose Luis Puñales was named as administrator of a brewery which had belonged to the Bacardi Corporation. Puñales said: ‘The previous administrator had been Pepin Bosche, a famous economist. We are talking about a semi-illiterate replacing an economist.’¹¹ The strategy of prioritising production and placing loyalists to lead industry was evidently successful. In October 1960, before MININD was set up, Guevara reported that most of the new state industries had increased production from the period preceding its transfer to state hands.¹² This does not just mean that production had exceeded 1958 levels, but that the threat of economic paralysis had been overcome. There had been some disasters, Guevara added, in unprofitable industries which workers had taken over in the name of the Revolution. But, he predicted these could be improved with major organisational changes and technological adjustments. Of the Department’s 300 factories, only ten were operating at a loss. Three of them were losing serious quantities of money. These were all factories that had been set up by Batista’s Bank of Economic and Social Development (BANDES).¹³

MININD produced a Procedure Manual with guidelines on accountancy and other administrative functions for the new administrators. Accountancy relied on statistical literacy which administrators who struggled to achieve 6th grade lacked. Guevara constantly pushed his directors, and through them, the administrators of production units, to dedicate themselves to learn statistical analysis. This was a precondition for his vision of administrative control of the economy, the successful implementation of planning, free from the anarchy of the capitalist market. With his eye constantly focussed on the most advanced administrative and technological techniques to provide the shortest route to communist development. Guevara ultimately hoped to create structures which facilitated increasing computerisation of accounting and control of the plan.

¹⁰ Orlando Borrego Díaz, interview, 24 January 2005.

¹¹ Jose Luis Puñales, interview, 21 January 2005.

¹² Orlando Borrego, *El Camino del Fuego*, La Habana: Imagen Contemporanea, 54-5.

¹³ BANDES was part of the apparatus set up by Batista to facilitate the pilfering of state revenue. See chapter 4.

ADMINISTRATIVE CONTROL OF THE ECONOMY

Against the assertion of the proponents of the AFS about the efficiency of applying 'control by the peso' that is, financial compulsion, Guevara argued that it was possible to institutionalise an administrative system of checks-and-balances to permit analysis of the entire production process. It was not necessary to depend on material incentives and other capitalist mechanisms in order to control and expand production. In January 1962, Guevara told MININD directors that with good control systems, modern accounting equipment, a strong planning apparatus and daily inventory controls:

'we can get round the problem of self-financing and convert financial compulsion, on which the AFS is based, into a type of administrative compulsion, in such a way that we can monitor the apparatus and have centres where the concrete results of the tasks of the factories can be overseen, and immediately they will sound the alarm when there is incompleteness of the plan of any other aspect and the problems can be remedied.'¹⁴

The preconditions for administrative control were knowledge of statistics and accounting methodology and the implementation of structures to monitor the costs of production. As long as it was accompanied by quality control reduction of costs would be the means by which the productivity and efficiency of industry were raised. The Budgetary Finance System (BFS), Guevara said: 'is fundamentally based on cost. This means moderating the economic management of the entity via the cost, which is the real index that shows how the enterprise is doing... what interests us is the analysis of cost, as it falls, its composition and where action can be taken to lower it.'¹⁵ Cost analysis was the alternative to financial compulsion which applied the profit motive to production and undermined the development of a collective

¹⁴ Guevara, 'Reunion Bimestrales', January 1962, Ministerio de Azúcar, *El Che en la Revolución Cubana: Ministerio de Industrias*, tomo VI, La Habana, 1966, 150-151.

¹⁵ Guevara, *Bimestrales*, 9 March 1963, 348.

attitude towards national production: part of Guevara's notion of Cuba as one big factory. Cost analysis would replace the profit motive as a lever to improving both labour and capital productivity and efficiency. Borrego pointed out that Guevara believed that 'socialist enterprises must be more efficient than capitalist ones'.¹⁶ But he believed that only if this efficiency came through administrative control could there be a transition from socialism to communism, far removed from the operation of the law of value.

Advanced management techniques

Technology has no ideology, argued Guevara. Technology includes administrative and managerial techniques. He argued the case in military terminology that would be understood by a population emerging out years of dictatorship and insurrection: a US-made rifle is a weapon in the service of exploitation in the hands of Batista's troops, but an instrument of liberation in the hands of revolutionaries, although its function is to kill in both cases.¹⁷ The AFS had emerged out of the level of development of capitalism in the 1920s in Russia, using techniques far behind those operating in the capitalist corporations of 1958 Cuba on which the BFS was based. In MININD's first bimonthly Guevara told directors that the BFS:

'...is very similar to the accounting system of the [pre-1959] monopolies, but no one can deny that the monopolies have a very efficient system of control and they take great care of every penny... So it's not important who invented the system. In short, the accounting system that they apply in the Soviet Union was also invented under capitalism.'¹⁸

From 1959, Guevara studied bourgeois literature on the science of management, searching for the practical influences he could apply in the Department of Industrialisation. According to Borrego he studied prolifically, from the classic texts

¹⁶ Borrego, interview, 23 November 2004.

¹⁷ Arturo Guzmán Pascual, 'La Acción del Comandante Ernesto Guevara en el Campo Industrial' in *Revista Bimestre Cubana*. No 8 (1998). La Habana: Sociedad Económica Amigos del País, 32.

¹⁸ Guevara, *Bimestrales*, 21 December 1963, 420.

to contemporary material. Borrego recalled particularly French industrial engineer Henry Fayol, from the classical school of managers, and Lea Iacocca, whose system of management training was adopted by the Ford Motor Company in the US.¹⁹ In addition to understanding the theory, Guevara studied the organisational structures of the most productive capitalist enterprises in Cuba, as they were nationalised, to find which advanced techniques could be used for the socialist administration. Borrego said Guevara believed:

‘...that the advances achieved by humanity in the historical process of development should be utilised to the maximum, without fear of any kind of ideological contamination. It was precisely the rejection of this reality in many socialist countries that had held back their economic and technical-scientific development by underestimating the advances reached in the most developed capitalist countries, especially in relation to management techniques.’²⁰

Having studied the administrative control mechanisms of the US monopolies in Cuba, Guevara was struck by the backwardness of Soviet techniques. Borrego, who accompanied Guevara on his first mission to the USSR in 1960, recalled their visit to an electronics factory with 5,000 workers which used an abacus to do accounts. Guevara had been studying the US-owned Cuban Electricity Company, Shell, Texaco and others which used the latest IBM accounting machines.²¹ When the apparatus of MININD was under construction, Guevara ignored the advice of Soviets who argued against having a Department for Organisation and a Department for Investigation. Enrique Oltuski, who was responsible for designing this structure, explained:

‘They didn’t feel the need to have a Department of Organisation because they had been organised for many years, but we were starting something

¹⁹ Borrego, Interview, 16 November 2004. Borrego later published his own study of management systems, *La Ciencia de Dirección: algunos antecedentes y enfoques actuales*, La Habana: SUPSCER, 1989.

²⁰ Borrego, *Camino*, 157-8.

²¹ Borrego, *Camino*, 60.

new, without experience and it was important to create a Department of Organisation so that we would fully understand the technical concepts behind how to administer an enterprise. The same occurred with the Department of Inspection. Che said to us: I believe in man, but control him. Che was very strict in this. The Soviets thought their organisation was perfect.’²²

Miguel Figueras, who became MININD’s director of the Perspective Plan, said that Guevara authorised him to subscribe to three US business magazines, including *Fortune*, which serialised *My Years With General Motors* a book by Alfred P Sloan, President of General Motors until 1956. Sloan was accredited with creating a new management concept which involved:

‘...the coordination of the enterprise under top management, direction of policy through top-level committees and delegation of operating responsibility throughout the organization. Within this framework, management staffs conduct analysis, advise policy committees and coordinate administration. Mr Sloan’s idea was to establish “decentralized operations and responsibilities with coordinated control.” At the individual level, his policy was simple: “Give a man a clear-cut job and let him do it.”’²³

Figueras stated that Guevara was impressed with the General Motors’ management system, with its single centralised bank account and budget.²⁴ In addition to the budgetary structure, other precepts of this management system are evident in the BFS structure: for example, the establishment of clear guidelines to determine levels of decision-making and responsibility. Guevara refused to make decisions which the guidelines stipulated should be made at inferior levels, unless there were valid reasons. Guevara has been misinterpreted as an advocate of centralisation *per se*. In fact he understood this as a dialectical, not an absolute, question, which should be

²² Enrique Oltuski, interview, 15 February 2006.

²³ http://media.gm-powertrain.at/powertrain-media/background/docs/gm_history.doc.

²⁴ Miguel Figueras, interview, 27 January 2006.

resolved at each stage according to changing circumstances. His slogan was: centralise without obstructing initiative and decentralise without losing control.²⁵ A policy of 'sole responsibility' was outlined for administrators, which meant that after collective consultation with the trade unions and the party in the production units, the administrator had the final decision and responsibility for the consequences of the measures taken. This organisational mechanism was posed by Guevara as a direct alternative to that operating in the USSR:

'At the beginning in the Soviet Union they made a trilogy, the Holy Trinity of the party secretary, the trade union head and the administrator. This trinity was a total disaster. [MININD] has sole responsibility... We have to be clear that it is not the function of the active revolutionary nucleus to supplant the administrative authority.'²⁶

Despite the implied heresy in upholding capitalist techniques over those in the Socialist bloc, Guevara went public with his analysis, printing articles on the subject in *Nuestra Industria*. Tirso Sáenz, who became MININD's Vice Minister of Technical Development from 1963, had worked for Proctor and Gamble before the Revolution. He said: 'several times Che called me to talk to him about how Proctor and Gamble worked. What were the management mechanisms? How did they stimulate people?'²⁷ The Consolidated Enterprise of Petrol in MININD was an amalgamation of the three refineries in Cuba owned by Esso, Texaco and Shell. Borrego claimed that they maintained and perfected the pre-1959 system of control and it was considered to be the administrative model in MININD.²⁸

In 1962 Alexander Gerschenkron published his book of essays on *Economic Backwardness in Historical Perspective* arguing for state-led industrialisation to pass

²⁵ Juan Valdés Gravalosa, interview, 22 February 2006.

²⁶ Guevara cited by Borrego, *Camino*, 278. See also Guevara 'Discusión colectiva; decisión y responsabilidades únicas' in Ernesto Che Guevara, *Obras 1957-1967*, Tomo 2, La Habana: Casa de Las Americas, 1970, 119-135.

²⁷ Tirso W Sáenz, interview, 7 January 2005.

²⁸ Borrego, *Camino*, 297.

rapidly through necessary stages of development.²⁹ According to Borrego, Guevara was interested in the fact that bourgeois authors of the period had concluded that the state should formulate programmes and plans to foster industrialisation in underdeveloped countries.³⁰ If proponents of capitalism could argue for the importance of centralised administrative control and directed investment, then their role under socialism must be vital.

Guevara insisted that automated control of the economy was achievable. The ministry had to focus on cadre development, the creation of a powerful statistical base and attention to supervision reports, and to struggle for quality at all levels.³¹ He told MININD directors:

‘every unit should be perfectly calculated so that mistakes can be discovered through the indices and this system can be perfected until it is weekly, then daily; so that accurate reports will come to the Ministry and they can be tabularised and everything can be detected and the enterprises can take measures constantly, in a system that I have seen of teletype, or whatever it is, for national information, so production is controlled day by day and measures taken, the inventories controlled so that they bring to light whenever there is an excessive inventory or a defect in any one of the units, or in any of the enterprises... Statistics, the correct information at the unit level... you have to organise and create the necessary indices so that information flows quickly from the base to the central organism.’³²

Borrego claimed that by 1963 a good level of management had been achieved, but that they were still struggling to overcome errors committed in the earlier period: lack of an investment plan, failure to prioritise tasks, lack of quality, and failure to

²⁹ Alexander Gerschenkron, *Economic Backwardness in Historical Perspective: A Book of Essays*. Cambridge, MA: Belknap Press of Harvard University Press, 1962.

³⁰ Borrego, *Camino*, 101. It is not claimed that Guevara read Gerschenkron, but that he knew the arguments posed by this school of development theory.

³¹ Guevara, *Bimestrales*, 28 September 1962, 323.

³² Guevara, *Bimestrales*, September 1962, 320-321.

reduce costs and lack of technicians. In June 1964, the *Manual for Factory Administrators* was published partly to institutionalise methods of supervision and control, combining theory and practical instructions for factory administrators.³³ Section two outlined the 'fundamental concepts'. These include 'analysis of costs', 'economic analysis', 'socialist management principles', 'financial discipline' and 'productivity'. Section five detailed the costs of production, with instructions for carrying out economic analysis of the factory, advice on managing savings, and the importance of developing inquisitive analytical skills, cultivating 'a disciplined non-conformism' in approaching problems and encouraging a collective interest from workers. Section seven dealt with organisation, effective work methods and administrative techniques, summarising different management methods: global, detailed, sectoral, generic, and instructive. It concluded that: 'The obligation of the administrator is to point out the goals and to control their completion. The rest of the tasks can be decentralised.'³⁴ Discussing the flows of production the *Manual* stated that: 'The organisation of work represents, at its base, the plan of mutual coordination between men and machines.' The goal was 'to produce more, of better quality, and at lower cost'³⁵ Produced nearly five years into Guevara's experience of organising and managing Cuba's industry, the *Manual* details many of the mechanisms he established to create an effective apparatus for accounting, supervision and investment.

The component elements of the BFS apparatus of administrative control are detailed below, including an explanation of the obstacles faced in the implementation of each aspect: statistics and accounting; inventories; control, supervision and inspections; investments; and quality.

³³ Ministerio de Industrias. *Manual Para Administradores de Fábricas*. 2nd ed. La Habana: 1988. Reprint of 1964 edition.

³⁴ *Manual*, sección 7, asunto 2, página 8.

³⁵ *Manual*, sección 7, asunto 3, página 1.

STATISTICS AND ACCOUNTING

'Che is considered to be a founder of economic statistics in the revolutionary stage. He started to create networks to capture and process data and statistics. He introduced the application of computers to statistical work, despite the fact that computing was very rudimentary at that time. Che worked on the organisation of a regional network, attempting to create an apparatus where local enterprises would yield accumulated statistics to regional offices, which would then send information up to the national level. For technical reasons the achievements were limited, but the idea was to create a network to capture national statistics. They even tried to apply this in the Ministry of Industries.'³⁶

Aside from the absence of computers in Cuba, the key obstacle to Guevara's vision of automated national accounts was the absence of accounting culture among the young, largely unskilled administrators, placed at the head of nationalised industries, plants and workshops between 1959 and 1961. Once it was clear that a production crisis had been averted and the BFS had institutionalised control procedures, the lack of statistical collection and accountancy systems became a priority for MININD. In the first bimonthly meeting, Guevara said: 'We have to insist on statistics because we are thinking more than anything of the idea of mechanising all accounting, to mechanise the processes even at the lowest level possible in order to have the best control possible.'³⁷ In March 1962, Guevara complained about the lack of audits and said that Vice Minister of Light Industry, José Manuel Castiñeras would study the problem of the audits and, if necessary, suspend them or reduce them while a group of specialist auditors gave accountancy classes, based on the new Procedure Manual, to accountants in production units at a local level.³⁸ The administrators were to learn

³⁶Fidel Emilio Vascós González, interview, 16 February 2006. From 1976 to 1996, Vascos was President-Minister of the State Comisión of Statistics and Director General of the National Office of Statistics.

³⁷ Guevara, *Bimestrales*, January 1962, 153.

³⁸ Guevara, *Bimestrales*, 10 March 1962, 224.

and apply these new skills but EC directors were responsible for staying informed about comparative costs, inventories and production processes:

‘It is not difficult to know. It is nothing more than the product of a method, it is a method of work which allows you to have the results of the activities of the enterprise, factory by factory and globally, on the table every week and to check where it is bad and what you have to resolve – without waiting for the administrator to explain to you so that you then explain to the vice minister, who explains to me, and that I explain to the government that you lacked raw materials.’³⁹

The directors themselves had to be up to date with the production statistics of the entities under their jurisdiction. In the bimonthly meeting of September 1962, Guevara tested enterprise directors about their planned contribution to the national budget with specific questions about particular factories. The questions demonstrate both Guevara’s working knowledge about the 40 Consolidated Enterprises grouping around a thousand production units, and the diversity of production under the jurisdiction of MININD, from petroleum to wheat: ‘How many hours was Petroleum stopped?... Factory 203-9, why did it stop?... How many thousands of flour sacks did La Molina bag from here? How many tons of wheat were milled?’⁴⁰ Guevara announced that in the following bimonthly meeting the directors would face an exam to test their knowledge of the indices. The next meeting was in March 1963, after a gap of five months, which included the Missile Crisis of October 1962. Enterprise directors were put in the front row and given an exam with 15 questions to answer from memory.⁴¹ This was repeated before every bimonthly meeting. As director of the EC of Mining, Edison Velázquez had to sit bimonthly meeting exams. He recalled: ‘The tests were checked by a group of people, so for instance, if I said one ton of nickel cost \$23,000, they might say, you’re making it up, it costs \$25,000. They would grade you, you had to get over 60%.’⁴² Three failures would lead to

³⁹ Guevara, *Bimestrales*, 14 July 1962, 259-260.

⁴⁰ Guevara, *Bimestrales*, September 1962, 326.

⁴¹ *Bimestrales*, March 1963, 335-6.

⁴² Velázquez, interview, 21 January 2006. Other interviewees who had been EC directors also told me about the exams.

automatic replacement, although this never actually occurred. EC directors, Guevara said, had to lead via numbers, but they also had to visit the units to observe what the numbers cannot reveal and to prevent separation from the masses.⁴³ Directors had to visit and inspect a factory in the EC every two weeks. Failure to do so led to one day's pay being docked. Juan Borroto, head of the Department of Inspection said that at one point many directors were falling behind in this task. The Vice Minister of the Economy cantankerously remarked: "let them dock me one month", which is exactly what Guevara ordered when he heard about the comment.⁴⁴ Guevara insisted on discipline and was known to make an example of his closest colleagues.

For Guevara the key was not just data collection, but analysing it in order to tackle deficiencies and locate bottlenecks in order to improve efficiency and lower costs. In August 1963 he cited the example of an administrator of a textile factory who had a wall full of daily production graphs. When asked why the chart rose or fell, the administrator did not know: 'We are characterised by the total lack of analysis at all levels,' Guevara complained.⁴⁵ Even Alfredo Menéndez, director of the EC of Sugar, he said, did less analysis than he had done as an analyst at the Cuban Sugar Institute, which represented the private interests of the sugar industry before the Revolution: 'This is a serious contradiction; Sugar is one of the enterprises here that carries out analysis and that can present data and use it rationally based on experience'.⁴⁶ Guevara pointed out that directors had had nearly four years to learn these skills and emphasised why it was so important for production: 'it is not the same to analyse production on day 10 as to analyse it on day 25 when almost another month has already passed with setbacks'.⁴⁷ Awareness of production problems was essential to preventing stoppages and bottlenecks, thus improving efficiency.

Once procedures had been established to collect statistical data, Guevara focussed on the need for financial discipline: completing reports on time and adequately analysed. Economic heads in the ECs had to submit accounts, with the directors'

⁴³ Guevara, *Bimestrales*, March 1963, 353.

⁴⁴ Juan Borroto, interview, 26 January 2006.

⁴⁵ Guevara, *Bimestrales*, March 1963, 357-8.

⁴⁶ Guevara, *Bimestrales*, March 1963, 362.

⁴⁷ Guevara, *Bimestrales*, March 1963, 367.

approval, to the Vice Minister of the Economy by the fifth day of the month following operations. Guevara also analysed the reports and occasionally he called directors to discuss the economic and financial state of the enterprise, to render accounts and provide information about distinct balances of account. Francisco Buron Seña, a head of audits in MININD, said: 'It did not mean they had to become accounting specialists but they had to dominate the essential aspects important in the functioning of management.'⁴⁸ The lack of automation meant that most of these accounts were done manually.

In October 1963 Guevara commented sardonically that the EC of Cigarettes had passed into the annals of accounting history as: 'the first enterprise in the history of accounting to submit its financial record, not with a certification that the data is exhaustive, but rather a postscript that the data could not be relied on.' While the 'gentlemen' of the EC of Beer and Malt had honoured the pre-revolutionary tradition of hiding profits, they appeared to have adjusted the inventory to the value of four million peso, he revealed. All those responsible for financial indiscipline would be removed, Guevara warned, even if that meant there were no economic heads left as was the case in the earliest stage of the Revolution. What's more, he said, enterprise directors held responsibility and would also face investigation and punishment for statistical failures.⁴⁹ In response to one director's suggestion of organising a course about the BFS, Guevara said: 'It is useless to hold a seminar about the budgetary finance system if the statistical apparatus of the ministry and the financial apparatus of the ministry don't function, because at the base of the BFS is knowledge of data to facilitate centralised management'.⁵⁰ Administrative control, via statistical data and basic accountancy, was a building block of his BFS. By 1964 there is no more mention of statistics and accounting in the bimonthly meetings, suggesting that the serious deficiencies had been largely overcome. Juan Borroto confirmed the problem was resolved and that a Department of Statistics was set up in MININD staffed by accountants trained under capitalism who applied their expertise to socialist planning. Figueras set to work on an input-output matrix with two specialists who

⁴⁸ Francisco Buron Seña, Radio Interview (taped), Havana Radio, 2004.

⁴⁹ Guevara, *Bimestrales*, 12 October 1963, 409.

⁵⁰ Guevara, *Bimestrales*, October 1963, 411-12.

had trained at a specific institute in the US, one of them a woman named Zoila González.⁵¹ They collated purchases and sales information from the ECs and made a matrix using Cuba's first computer, which Guevara had imported.⁵² This gave them an overview of the global balance of the ministry which facilitated improvements in efficiency.

INVENTORIES

*'The excessive inventory is money dormant, whether it consists of raw materials, or the finished product; either of these is a burden on the enterprise. Our enterprises' funds are contained in such a way that they cannot have a huge inventory.'*⁵³

Under socialism, argued Guevara, all production units in Cuba should be considered elements of one big factory, which was the Cuban nation. The law of value could not operate in exchange between state-owned units, because there was no change of ownership. Under the BFS, production units were not independent entities and therefore did not possess their own resources. Excess resources in one factory should not be seen as the individual surplus of that unit, but rather the bad distribution of resources within a large and complex system of production. For this reason Guevara emphasised the need to control and monitor inventories, the stocks of resources held in production units under MININD: raw materials and other inputs, capital goods, spare parts and final products. Guevara's insistence on the importance of inventory control was influenced by his appreciation of the efficiency of US corporations. According to Edison Velázquez, Guevara was impressed with the US system at Nicaro mine where there was a card in each warehouse listing the parts stored in each one. This prevented pilfering and allowed control of the inventory by providing a

⁵¹ No further information was obtained.

⁵² Figueras, interview. Details about the use of computers in chapter 9.

⁵³ Guevara, *Bimestrales*, January 1962, 150.

record of stocks so that replacement orders could be placed in advance, and the inventory was neither excessive nor deficient. Velázquez explained:

‘It was important to have a detailed study of the supplies and the production cycle; to know if a spare part came to Cuba from England, for example, and it took six months to arrive: to know if you need ten spare parts a year, to order replacements in advance. However, if you purchased a hundred pieces it would be dead capital, or it could deteriorate within five years. Che was very concerned about this and impressed with how well organised the capitalists had their warehouse. The card would be able to tell you what the parts were and how many we consumed a year. It was the best way to maximise the capital without wasting any resources.’⁵⁴

The system of card-controlled inventories was adopted so that: ‘even the toilets had a card recording control of inventories and basic means’, according to Yolanda Fernández Hernández, who worked on investment programming in MININD.⁵⁵ She said that when new investments were planned and plants built they always started with the warehouse; then established control of the inventories and capital goods, until the factory could begin production: ‘A screw’s gone missing, where is it? You have to know what you have to produce with.’⁵⁶ When industries were nationalised their inventories were low, because 95% of capital goods and 100% of spare parts came from the US.⁵⁷ When replacements or maintenance were needed parts were ordered by phone to arrive in two days. But as the US imposed the blockade these supplies dried up and stopped. The Soviet bloc stepped into the breach but there were three significant problems. Firstly, the different technologies; secondly, existing storage facilities were inadequate for the huge shipments arriving from the socialist countries; thirdly, replacement parts had to be foreseen and included in the plan. Extra supplies would have to wait for the following year’s plan. Velázquez said:

⁵⁴ Velázquez, interview, 21 January 2006.

⁵⁵ Yolanda Fernández Hernández, 24 March 2006.

⁵⁶ Fernández, interview.

⁵⁷ Arturo Guzmán Pascual, ‘La Acción del Comandante Ernesto Guevara en el Campo Industrial’ *Revista Bimestre Cubana*, No 8 (1998), 29

'You couldn't ask for money after drawing up your budget for things which you hadn't foreseen. It was a planned economy, based on inventories. The technician should know how long each part of equipment has been used for and know when it is coming up for replacement.'⁵⁸ In March 1963 Guevara announced to directors that the task of inventory control had been decentralised from the ministry to the EC management level, warning that: 'it is a huge task that is very difficult.'⁵⁹

Velázquez said that his EC of Mining achieved inventory control during Guevara's time as minister. A chief of production in every warehouse reported to him monthly on the state of inventories. Other specialists analysed how long the inventory would last and if one part was being used up too quickly from one warehouse, they would investigate the reason. This avoided production shocks and dead capital: 'Given the number of warehouses, if there was dead capital in each it would add up to millions of peso worth throughout the country.'⁶⁰ When inventories had grown the head of production in that EC would inform Guevara. He demanded an explanation of the cause from the EC director, who had to be well informed about the production process. Guevara could assess the situation via an analysis of the costs. Velázquez said:

'The cost is like gossip. He would test us on our basic costs, how much on salaries, on coal. So I had to study!... He asked me once "why did your inventories go up?" and I told him that I had spent extra money on manpower to fix some broken pipes. I had to know that. He knew that as well because the inventories were an element of economic analysis and he could see where you had spent more money than usual.'⁶¹

The important point here is not just that Guevara believed in the importance of inventory control but the level of detail which he personally went to in order to

⁵⁸ Velázquez, 21 January 2006.

⁵⁹ Guevara, *Bimestrales*, March 1963, 353.

⁶⁰ Velázquez, interview, 21 January 2006.

⁶¹ Velázquez, interview, 21 January 2006.

perfect the apparatus of economic analysis.⁶² Rosario Cueto was personal assistant to the Vice Minister of Basic Industry, Arturo Guzmán Pascual. She kept a card index with information about all the inventories of basic means of production for each EC, which she said: 'allowed us to act quickly to avoid a crisis in supplies to industry.'⁶³ Cueto travelled to Nicaro every month with either Guzmán or Guevara to participate in their management council meeting. On one occasion, Guevara became furious because of accounting adjustments which had been made. She said:

'I had seen him irritated before, but never like that. He spent an hour explaining why adjustments could not be accepted, especially when things were missing, and he pointed out the economic implications that this could have. It could hide thieving, corruption, indicating people had an interest in falsifying information. He said this made it possible to conceal crimes... He asked who had authorised the adjustments but the person who was responsible wasn't there, which made him more cross.'⁶⁴

Francisco Buron Seña claimed that there was no stealing in MININD both because of revolutionary commitment and the implementation of control mechanisms to prevent it.⁶⁵ However, the transcripts of the bimonthly meetings of MININD reveal that thieving had occurred. It is also clear that Guevara took a strong line to deter it. Mistakes were accepted but not thieving: 'It is one thing to put your foot in it' he said 'but another to dip your hand in the till.'⁶⁶

In December 1963, announcing that control of inventories would be one of the main ministry tasks for the pending year, he revealed that in the weekly meetings to

⁶² Chapter 9 details the importance which Guevara gave to the mining sector for Cuban economic development.

⁶³ Rosario Cueto Álvarez, interview, 29 March 2006.

⁶⁴ Cueto in Adys Cupull and Froilan González (eds), *Entre Nosotros*. La Habana: Ediciones Abril 1992, 116.

⁶⁵ Buron, interview.

⁶⁶ Buron, *Radio*.

analyse the EC's annual reports anomalies in inventories were the norm, the result of financial indiscipline and thieving:

'People have been imprisoned in the last two months for dipping their hands in the till. The weak point is storage...and spare parts, above all in the big enterprises, it is a weak point where the nation's money goes off in private hands... misappropriation of funds caused by the lack of control and discipline.'⁶⁷

He repeated the complaint in September 1964 and warned that the ministry would take 'drastic measures' to combat financial indiscipline, particularly the adjustment of inventories. He concluded that: 'the possibilities for thieving will exist for a long time under socialism until there has been a change in people's mentality.'⁶⁸ In this context ideological work was vital so that individuals understood how their interests were reconciled with those of society. A thorough investigation would be launched into these anomalies, he announced, in which the EC directors would be held responsible: 'I don't know whether it is due to a complete lack of knowledge of the elemental rules of accounting, or if it is with the collusion of directors, but I know that it happens and it is serious.'⁶⁹ Guevara recognised that some directors attempted to adjust inventories to avoid violating the regulation on control of inventories, but warned them that if they came across anomalies they must inform the ministry, rather than hiding them, so that inspectors could be sent immediately to verify the problem.⁷⁰

Miguel Domínguez, director of the EC of Soaps and Perfumes, which had the best record on inventories, was instructed to set up a team of advisors to assist other directors to organise theirs. Santiago Riera, Vice Minister for the Economy, announced that MININD's total inventory was \$26 million peso.⁷¹ At the end of

⁶⁷ Guevara, *Bimestrales*, December 1963, 419.

⁶⁸ Guevara, *Bimestrales*, 12 September 1964, 533.

⁶⁹ Guevara, *Bimestrales*, September 1964, 533-4.

⁷⁰ Guevara, *Bimestrales*, September 1964, 534.

⁷¹ Santiago Riera, *Bimestrales*, September 1964, 538.

1964, MININD's inventory was \$31,078,400 peso.⁷² Guevara complained that inventories of raw materials had grown significantly and many resources were not included in the plan and went to waste.⁷³ On his monthly factory visits, Guevara himself would inspect the warehouses. Buron said: 'there were cases of some directors who, perhaps because they had been recently designated, had not even visited the warehouses. The fact that Che inspected there was a lesson for them of the importance of empirical checks as an instrument of management; that you cannot just base yourself on reports.'⁷⁴ This approach to economic analysis via statistical analysis and reports, backed up by on site investigations, was exemplified in the apparatus established for supervision and inspection: functions which Guevara had prioritised since he first began to lead industry.

SUPERVISION AND INSPECTION

'When they created MININD, Borrego explained the organisational structure on a board in the ministry. Borrego began to speak about some sub-secretariats and Che said to him that the first organ that should be under his supervision was the management of supervision and control.

*"This man should be my eyes and ears to allow me to see what I cannot see and to hear what I cannot hear".'*⁷⁵

In the Department of Industrialisation, a Section of Inspection, Investigation and Audits had been one of the first set up. Velázquez was head: 'We investigated indisciplines and anomalies. We audited the enterprises and important factories. If there were problems with the audit or investigation we did a detailed inspection. We

⁷² *Memoria Anual 1964*, Ministerio de Industrias, República de Cuba, 1965.

⁷³ Guevara, *Bimestrales*, September 1964, 537.

⁷⁴ Buron, interview.

⁷⁵ Buron, interview. Velázquez, interview, 19 January 2005 & Borroto, interview said the same. The sub-secretariats were soon renamed Vice Ministries, an ideological change which reflected realignment from US institutional models to Soviet and European ones.

consulted with the revolutionary organisations and the trade unions about their relationship with management.⁷⁶

Juan Borroto, who took over from Velázquez, said that by the time the Department became MININD in February 1961, there were already 100 people in this Section, which became the Department of Supervision within MININD. Guevara was personally involved in analysing the results of these investigations, always concerned to create mechanisms of guidance and control. Reflecting back he said: 'it was an endless job, exhausting, to read a multitude of inspections and audits that reflected the general state of permanent chaos of accounting without there being any remedy.'⁷⁷ Borrego recalled: 'Usually, Che attended to these despatches in the late hours of the night, because of his wish to fully concentrate on this analysis and to take pertinent decisions without the urgency of other daily tasks.'⁷⁸ Alexis Codina confirmed this from his own experience as head of accounts in a bakery in 1961. He was catching up on the accounts at 2am when Guevara appeared and asked to tour the factory: 'He overwhelmed me with questions about the costs and accounting', Codina said. The following year Codina was promoted to head the accounts of the EC of Flour. One day his director, Jesús Suárez Gayol, called him at 3am for a meeting with Guevara.⁷⁹

'Che was standing up in his office with the top draw of a filing cabinet pulled out, leaning on the sharp metal corner, reading a report which he had to discuss at 8am. He explained that if he sat on the armchair he would fall asleep, which is why he made himself uncomfortable. He had the financial records of our enterprise and started asking me questions. For example, about the sales ledger, registering what clients have ordered but not paid for. These were subdivided into state sector, rural sector and the private sector. Our accounts sale ledger for the private sector had increased. Che asked me who had authorised me to finance the private

⁷⁶ Velázquez, interview, 19 January 2006.

⁷⁷ Guevara, *Bimestrales*, 11 July 1964, 488.

⁷⁸ Borrego, *Camino*, 73.

⁷⁹ 'Gayol was an extraordinary person, very intelligent. It is he who Che called El Rubio [the blond] in his diary and he was the first to fall in the war [in Bolivia].' Codina, interview.

sector, as I was giving primary materials to a sector that was not paying me for them. I confessed that I had not made that type of analysis.’⁸⁰

Later, the task of checking inspection reports passed to Orlando Borrego as First Vice Minister. Then through 1962-3, the supervisory procedures were decentralised to the ECs which all had an Office of Supervision, in addition to five provincial offices which reported direct to the ministry. Guevara warned directors against taking people or reports on trust. This was a reflection of mental or spiritual laziness, he said, or of subjectivity in appreciation, the tendency to see everyone through rose colour spectacles without bothering to analyse profoundly their work: ‘You have three sets of eyes working to the same ends, four with your own: the eyes of the ministry’s supervision, the eyes of the provincial delegations’ supervision and the eyes of the supervision in your own enterprise... Weaknesses are discovered through supervision.’⁸¹ In early 1963 Borroto reported problems with the supervision apparatus. In July 1964 Guevara announced that the ministry would recentralise the personnel and resources of the management of inspection because enterprise directors were failing to implement it. This serves as evidence of Guevara’s dialectical approach to the issue of centralisation and decentralisation. When control was lost measures were taken to re-establish it. He said: ‘We are at a level of development in which we cannot permit a return to the errors that were perfectly permissible in 1961 but cannot be permitted now.’⁸² It became the General Office of Supervision, divided into three departments – inspection, auditing and investigation – which responded to EC summonses to carry out these tasks. In addition they carried out three-monthly checks of each EC to assess how they were fulfilling the annual tasks; four or five work priorities highlighted in MININD’s annual review. Nationally, the Office employed 600 workers including office personnel who programmed the regular checks.⁸³

⁸⁰ Códina, interview.

⁸¹ Guevara, *Bimestrales*, September 1962, 314.

⁸² Guevara, *Bimestrales*, July 1964, 489.

⁸³ Borroto, interview & Guzmán, *Acción*, 450.

Audits dealt with the financial state of the enterprises. Inspection checked functional apparatus; equipment maintenance and the work of personnel. Investigation was a tool which allowed more profound analysis and which, in Guevara's view, had a political importance. It was responsible for responding to workers' complaints and opinions. Borroto said the investigatory apparatus ensured that management were conscientious about their own behaviour, knowing that any complaints would be thoroughly investigated: 'Guevara operated with the principle of constant doubt', he said, so everything had to be investigated and verified; 'he knew he had a team which could verify everything.'⁸⁴ Guevara announced that: 'the department of inspection is going to be made into a powerful department at the ministry level.'⁸⁵ Clearly inspection was a vital instrument in the emphasis on administrative control of the economy integral to the BFS. In addition to the principle of constant doubt, was the rule that supervisors must be outside of administrative functions to ensure objectivity and remove all vested interests. Guevara explained: 'I cannot make an inspection of MININD; it's too difficult, it's not logical or correct. Because, as honest as I might be, I will present mistakes moulded by my own decisions as correct... I cannot be the one to analyse them.'⁸⁶

The administrators' *Manual* stipulated that they have daily production reports in their hands within the first four hours of the day. The departments, sub-sections or offices of quality control, work and salaries, planning, movement of materials and products, personnel, heads of production, office of administrators and economic heads, had to report any daily deviations from the economic-technical plan. The *Manual* specified which elements each department should concern itself with. This was described as a systematic type of preventative control.⁸⁷ It stated: 'With the intention of overcoming the deficiencies observed in the inspection reports and to be able to obtain the benefits which can come from them, it has been circulated to all directors of the branches of production and consolidated enterprise directors that the best use of these investigations is through their discussion.'⁸⁸ Velázquez confirmed that in the huge

⁸⁴ Borroto, interview.

⁸⁵ Guevara, *Bimestrales*, September 1964, 536.

⁸⁶ Guevara, *Bimestrales*, 22 February 1964, 449-51.

⁸⁷ *Manual*, sección 4, asunto 7, paginas 1-4.

⁸⁸ *Manual*, sección 5, asunto 19, pagina 1.

complex nickel mines of Nicaro and Moa that he directed, this mechanism was in place:

‘In Nicaro the production heads bought me a report in the morning and I had a board meeting with the 40 engineers to see if there were any problems. I might say, for example, right we need two more shifts to resolve this because there is an accumulation of production in one point. You cannot wait to the end. The end is an autopsy, the corpse is dead. Prevention means checking during the process, not waiting to discover problems at the end of the day. I supervised one administrator at Nicaro and another at Moa. I often said to them “give me a production report every eight hours or every four”. And I had to inform the ministry of any problems.’⁸⁹

In four tumultuous years significant progress had been made from the chaos of retrieving flour at the docks without registering accounts to an obligation to submit production reports four hours into the working day. The investigation, auditing and inspection apparatus was essential to the BFS’s mechanisms of administrative control. Without the financial compulsion of the profit motive inherent in the AFS, MININD had to secure a way of ensuring financial discipline and accountability, and focus its workers on reducing costs, improving production and efficiency. Guevara has been dismissed as idealistic for his vision of revolutionary commitment and sacrifice. However, the importance he gave to the functions of supervision undermines that characterisation. Man was in the process of transformation along with his society and mechanisms were necessary to guide these developments.

COMMISSION OF ARBITRATION

In 1963, the Commission of Arbitration was set up within MININD to deal with disputes between internal ministry ECs concerning quality, quantity, price, and

⁸⁹ Velázquez, interview, 21 January 2006.

exchange rates, infractions of legal norms or regulations and incompleteness of agreements and contracts. Arbitration had legal status, so according to the *Manual* it should be considered as a last resort. Administrators with complaints relating to their production units should search for administrative measures to resolve the problems before referring to Arbitration. Marta Lugioyo, who had become a judge in 1957 under Batista whilst a member of the M26J, was one of the legal experts on Arbitration: 'I worked in evaluating industrial conflicts, the problems of quality, quantity of production... Arbitration gave legal coherence to the relations between enterprises.'⁹⁰ Arbitration was under the direct control of Guevara, and Lugioyo reported to him and Santiago Rieras, Vice Minister of the Economy. Although it was set up for internal ministry arbitration it expanded to mediate in relations between MININD and other institutions. When the Ministry of Foreign Trade (MINCEX) complained about the quality of products coming out of MININD for export, it was Arbitration's task to investigate and resolve the problems. They assisted with the issue of salaries and worked closely with the Office of Product Study, concerned with product specifications and presentation, and the Office of Quality and Norms, which established quality standards. Lugioyo said that because they dealt with legal questions, they had to have a comprehensive understanding of the BFS:

'Some institutions didn't understand Arbitration; nor that it was necessary to fine people for non-completion of contracts. INRA [National Institute of Agrarian Reform] and MINCEX defended the auto-financing system, so they couldn't understand that you would punish someone in relation to the delivery of products. There were also problems with JUCEPLAN [Central Planning Board]. This was all due to the differences in regards to the economic system.'⁹¹

Under the AFS exchange between enterprises and ministries was resolved by demand and supply market mechanisms; Guevara called this 'financial compulsion'. Guevara's BFS aimed to replace 'control by the peso' with administrative

⁹⁰ Marta Lugioyo, interview, 27 March 2006.

⁹¹ Lugioyo, interview.

compulsion so that exchange was controlled by contractual agreements. The Commission of Arbitration was a vital tool in this system; it was the mechanism that enforced the primacy of the contract and represented planned management of the economy. The fines imposed by Arbitration were monetary in nature, but they were imposed after the fact, as punishment for failing to stick to administrative contracts. They were not an expression of market forces influencing the character of production itself, as proposed by the AFS paradigm. In 1963, 104 proceedings were started by Arbitration, most relating to deliveries of raw material supplies, materials or finished products. Eleven related to problems of quality and 31 to incompleteness of contracts. This rose to a total of 237 in 1964; 12 concerned quality and 81 incompleteness of contracts. Of those totals, arbitration between ECs in MININD increased from 17 to 82 and on proceedings enacted on behalf of MININD ECs against MINCEX fell from 42 to 39 cases, the percentage decreasing from 40% to 16%. This reduction was partly due to the lack of contracts and delivery conditions agreed between the institutions, rather than a lack of problems. However, in 1964 only 20 claims were issued against MININD, but MININD had paid \$6,586,400 peso to other institutions in fines.⁹² In 1966 a National Commission of Arbitration was created and Lugiayo passed on to that. MININD's Arbitration, therefore, constituted another institutional apparatus created by Guevara which was consequently adopted on a national scale. Clearly Arbitration had demonstrated its utility.

ANNUAL REPORTS

When MININD was set up in February 1961, Circular 38 was issued; it contained guidelines for the 40 ECs to write annual reports. This was then replaced by an improved Circular 43 and finally by the stringent Circular 90. An annual schedule was worked out so that reports were received and reviewed weekly in MININD. The accounts rendered included not just details relating to the completion of the technical-economic and financial plans for the enterprise, but also their social

⁹² *Memoria 1964*, MININD, 92-4.

objectives, state of organisation, structure, personnel roles, and assessment of management personnel, training, perspectives and relations with the ministry management, trade unions, the party and other organisations of the masses.⁹³ Once complete, 100 copies of the report would be edited and produced by MININD's own EC of Graphic Arts and delivered to MININD Management Council a month before it was due for discussion. Guevara would nominate three *compañeros* to carry out an in-depth analysis of the balance of the enterprise. They had to visit that EC's units of production, attend management meetings, check its economic, administrative and productive procedures, and produce an evaluation. The relevant branch head also produced an analysis of the EC. From the Office of Supervision, Juan Borroto would send two investigators, two auditors and two inspectors to analyse the ECs, some of which, like the EC of Flour, consisted of hundreds of small entities, a selection of which they visited. This process could take up to two months. They also did evaluations of the management personnel.⁹⁴ Finally, specialist managers in the appropriate area would submit an additional report analysing the enterprise. All these reports, plus any contributions by the ministry's advisors, had to be read before the weekly meeting of Circular 90, chaired by Guevara and including all those involved in the analysis, plus all other vice ministers and general directors of MININD. In this way management personnel would be aware of problems and progress of industrialisation as a whole.

Analysis of the EC usually took four hours, but occasionally continued the following day if it had not been completed. According to Villegas, Guevara checked that the ECs were focussed on improving and expanding production and technology. 'You had to answer a whole set of questions about installed industrial capacity, development plans, what raw materials you had, how you would substitute imports, how were relations with the trade union.'⁹⁵ An important aspect of Circular 90 was the appraisal of personnel. Arcos said:

⁹³ Arcos, 'Método y estilo de trabajo de Che', in *40 Aniversario Ministerio de Industrias*, Editora Política, Habana, 2001, 21 & Harry Villegas, interview, 22 March 2006 & Borroto, interview.

⁹⁴ Borroto, interview.

⁹⁵ Villegas, interview.

‘In a personal way, with the spirit of constructive criticism, Che discussed the evaluation of each leader, first invariably asking if it had been discussed with them and their opinion about it. The enterprise reports also had criticisms of MININD (including the minister, his apparatus of management and specialists) and the analysis also commented on bad decisions and deficiencies. These were analysed and suggestions made for measures to be taken or weaknesses to be overcome. And all of this had to be verified by the ministry inspectors.’⁹⁶

The Circular 90 discussions did not always take place in the ministry. On one occasion the whole team went to Nicaro in Oriente for the annual report of the EC of Mining. Guevara said the report was ‘brilliant’ except for the lack of a spirit of criticism by the director, Edison Velázquez.⁹⁷

After an exhaustive analysis the nominated team reached final conclusions. Agreements and announcements were formalised to serve as the basis for a plan of action in the following year.⁹⁸ Arcos concluded that: ‘Without doubt, this rendition of accounts and the meetings of control of production (monthly), were two of the most formidable tools that Che counted on to control this GIANT which had to be divided afterwards into five ministries.’⁹⁹ While the thorough task of rendering accounts and analysing their work was an annual one for the ECs, for the MININD Management Council it was weekly. Circular 90 was a scrupulous tool for scrutinising the functioning of MININD production units, as the basis for devising strategies for the rationalisation and expansion of production, based on collective discussion and analysis. The fact that inspectors, auditors and investigators, as well as vice ministers, carried out their evaluations lent the process the dynamic character necessary to keep the analysis lively and avoid bureaucracy.

⁹⁶ Arcos, *Método*, 23.

⁹⁷ Velázquez, interview, 19 January 2006.

⁹⁸ Nearly 30 examples of EC assessments appear in *El Che*, tomo VI, MINAZ, 25-132.

⁹⁹ Arcos, *Método*, 24. Arcos’s emphasis.

INVESTMENTS

Velázquez said that Guevara was impressed with the stringent capitalist control and management of investments in US subsidiaries in Cuba: 'Che applied the same procedures; no-one could carry out investments without the ministry approval.'¹⁰⁰ Centralised control of investments was facilitated by the BFS structure, where production units did not accumulate finances, but withdrew funds for operational costs from one bank account and all gains were paid into another which went straight to the ministry. Payments for goods exchanged were registered as debits or surpluses in the central bank accounts. BFS entities could not accumulate 'profit' or get credit for decentralised investments. Planning also imposed restraints on investments, as projects would have to be included in the annual plan and thoroughly analysed. Velázquez said:

'Your end of year balance included investments, so you had to find out from your technicians what was needed, list and justify it. If you needed new equipment you would detail how much it cost: materials, labour force and collaterals like soldering. You said in what period you planned to recoup that investment. The ministry decided which part of the proposal it would approve.'¹⁰¹

The ministry could also decide where investments should be made in order to expand production. This was a social investment, for example informing a bakery that a new oven would be constructed. The ministry would purchase the oven and give directives to the bakery to install it.

An 'investor' in MININD was the person nominated to oversee projects, from purchase of means of production, to construction, to organisation and inauguration. The investor was attached to the production unit, but the Ministry would advise them and provide technicians and material. For example, the ministry would provide the

¹⁰⁰ Velázquez, interview, 21 January 2006.

¹⁰¹ Velázquez, interview, 21 January 2006.

finances to pay for a mason who would work in the production unit under contract. This was agreed by the Vice Ministry of the Economy and co-ordinated by the Vice Ministry of Industrial Construction, headed by Ángel Gómez Trueba. The responsibilities of Construction were so extensive that a new building was needed to house the apparatus. It was built with the voluntary labour of MININD employees. Industrial Construction included project managers, investors and inspectors to carry out routine checks on every investment at three month intervals. As head of the Office of Supervision, Juan Borroto was given a programme of checks to be carried out. Borroto said: 'I had to inspect the projects with an architectural engineer sent to me to help with this task.'¹⁰² From 1964, Yolanda Fernández Hernández worked under Trueba in the team which was programming investments and inspections.¹⁰³ Before this apparatus was set up, however, investments in MININD were a problem of concern for Guevara. In the bimonthly meeting of March 1962 a director complained that urgent investments could not wait for the next year's plan. In one factory a roof was falling down but there had been problems in securing emergency investment to rebuild it. Another director complained that after investments were approved they were delayed in normal budgetary channels.¹⁰⁴ Guevara instructed directors to inform him when things got stuck, so that he could get things moving. This reflected a structural weakness in the ministry where the minister was so personally involved in breaking bottlenecks. Guevara articulated the problem: 'This organism is a process of change, we have terrible bureaucratic obstacles. We give the authority to those who should have it; we need to move things on with a lever of immediate action that you are not using gentlemen. The truth is that investments problems are bad. That investments are stopped is bad.'¹⁰⁵ Director of the EC of Cement, Ramírez pointed out that when investments in other enterprises were withheld, the production of cement was also obstructed, because the lack of storage facilities meant that production stopped until the finished product was removed from site.¹⁰⁶ Guevara reacted with fury:

¹⁰² Borroto, interview.

¹⁰³ Fernández, interview.

¹⁰⁴ Compañeros, *Bimestrales*, March 1962, 235.

¹⁰⁵ Guevara, *Bimestrales*, March 1962, 236-7.

¹⁰⁶ Ramírez, *Bimestrales*, March 1962, 237.

‘That the ministry cannot be shaken is outrageous. It is a symbol of the bureaucracy, of a lack of sensitivity. Gentleman this cannot be. You have to get stuck into consistently. It is everyone’s obligation...you cannot leave the nation’s economy in the hands of one man. This cannot be my decision; it has to be everyone’s responsibility. I can accept my due, twenty times over, for having once forgotten the problem, but this is an obligation of the entire ministry. Cement cannot be stopped; one man cannot stop an investment... Am I a magician? Are there not 20, 60, 100 Ches here that have the same concerns every day, that go out, that shout, that stamp their feet at all levels... We cannot progress, we cannot drive this with energy if we do not take resolute decisions, everyday, if we don’t get bitter every time things don’t happen.’¹⁰⁷

In summer 1962 Guevara complained that the level of investments in MININD was ‘scandalously low’ and blamed the ministry, in particular Construction. He also blamed JUCEPLAN, and the government, for permitting these errors. ‘So the criticism falls on me from all sides: for the government, for JUCEPLAN, for the Industrial Construction’, he announced. Part of the problem, admitted Guevara, was the result of JUCEPLAN’s overestimation the growth attainable without further investment. The initial planned growth rate was 20%, subsequently reduced to 15% and then to 9.8% but the real growth rate that year was just 1%. Actually, production increased in all the ECs, he said, but the 29% fall in sugar production distorted the results, because sugar accounted for a quarter of the ministries’ production.¹⁰⁸ Velázquez said directors did not request funds for investment because they did not want to take risks, but this held back economic expansion, impossible without investment. He said: ‘It was a lack of vision, but Che was a visionary so he insisted on investment.’¹⁰⁹

¹⁰⁷ Guevara, *Bimestrales*, March 1962, 238.

¹⁰⁸ Guevara, *Bimestrales*, July 1962, 285. For details about JUCEPLAN’s inflated growth predictions see Edward Boorstein, *The Economic Transformation of Cuba: A First Hand Account*, New York: Modern Reader Paperback, 1968. In 1964, MININD’s growth was planned at 12% and achieved 6%, *Memoria 1964*.

¹⁰⁹ Velázquez, interview, 21 January 2006.

By September 1962, MININD was meeting production plans, but not growing. Guevara declared that investment was the ministry's greatest failure: 'Investment secures future production: the more or less long term future. Then there is maintenance which assures production for tomorrow.... Everywhere we visit we find an absolute neglect of investments.'¹¹⁰ In response to these failings, investment functions would be centralised so that with correct management decisions would be made with objectivity, not decentralised at the unit level where surpluses are sometimes used in an irrational way.¹¹¹

Investment was one of the four key areas for 1963. In March 1963, Guevara warned directors to make their investment proposals concrete and realistic. The EC of Pharmaceuticals had begun ten investments simultaneously without guarantees, endangering the production plans. Projects had to be monitored, Guevara said, complaining that: 'Even today we haven't found a method of pushing the investor who is behind to focus on this task. We have a number of investors who are now dedicated to centralised works.'¹¹² The enterprise had to be linked to the investor and work together on the project. Guevara admitted that decentralised control of investments was preferable, but that centralisation was necessary because of failures at lower levels.¹¹³ He complained that MININD funds were below what had been requested from JUCEPLAN, adding: 'They spend money in the country on things much less important than industries' and he cited an example of spending \$50,000 on dancers.¹¹⁴

According to Velázquez, with the centralisation of investment functions in 1963 the situation was improved.¹¹⁵ In 1964 MININD's planned investments totalled 142,316,000 peso, of which 50% went on equipment, 27% on construction, 13% on assembly and 10% on other costs. However, following adjustments, partly made because of problems associated with the compatibility of imported resources, by the

¹¹⁰ Guevara, *Bimestrales*, September 1962, 310-12.

¹¹¹ Guevara, *Bimestrales*, September 1962, 320.

¹¹² Guevara, *Bimestrales*, March 1963, 344.

¹¹³ Guevara, *Bimestrales*, 10 August 1963, 372.

¹¹⁴ Guevara, *Bimestrales*, August 1963, 377-8.

¹¹⁵ Velázquez, interview, 21 January 2006.

end of the year approved investments had increased by 48,216 peso.¹¹⁶ By 31 December 1964 there had been a 78% completion of the annual plan of investments, including adjustments. A further 136,000 peso was planned for 1965, on 128 projects. Four new plants would be inaugurated in 1965 and another 18 projects would be underway during the year, with a total value of 286,525 peso to be invested by 31 December 1965.¹¹⁷

Investments were not mentioned again until the final bimonthly meeting in December 1964, when Guevara complained about bad investments in backward technology purchased in 1960 which was still not operational. New investments, he insisted, must consider world productivity.¹¹⁸ He announced that investment was the fundamental task of MININD, but that the apparatus would be changed completely so that the investor would come from the EC which would operate the new plants. Furthermore, they would have more responsibility for the actual work, visiting it frequently: 'not this absurd separation there is today between the intellectual who puts it together in an air-conditioned office' far removed from the natural problems which arise with a project in the countryside, for example.¹¹⁹ New investments should not take more than one year to complete. That meant ensuring continuity in the work occurring when, for example, a technician changed the specifications. He also highlighted the problem of technicians who change their minds during the investment process, leading to the need to change plans and projections.¹²⁰ The investors' task included training personnel to operate new equipment. The administrator of the production unit under development had to provide a weekly report on every aspect of the project's progress.¹²¹

Guevara battled through the major obstacles – the lack of financial resources, the lack of a medium or long term vision for production plans and the lack of an investment culture among those responsible for managing production – to ensure that

¹¹⁶ *Memoria 1964*, MININD, 31.

¹¹⁷ *Memoria 1964*, MININD, 32-40.

¹¹⁸ Guevara, *Bimestrales*, 5 December 5 1964, 547-8. This is detailed in chapter 9.

¹¹⁹ Guevara, *Bimestrales*, December 1964, 550.

¹²⁰ Guevara, *Bimestrales*, December 1964, 550 & 556.

¹²¹ *Manual*, sección 5, asunto 11, página 1.

an investment apparatus was built into the work of MININD. Investment was the key to expansion. The challenge, however, was to create mechanisms to foster an investment culture which did not rely on material incentives and other capitalist levers.

QUALITY

‘One of the first steps taken by Che was to contact the best known Cuban publicists and designers and ask for their collaboration in organising the marketing of the socialist industry in the 1960s. The difference is that the new department set up in the ministry for these ends adopted the name Study of Products.’¹²²

This Department for Norms, Metrology and Quality Control was to respond to the public demand for quality. Given the absence of market forces, controlling quality was an extremely important element of the apparatus of administrative control in the BFS. MININD adopted the slogan: ‘quality is respect for the people.’¹²³ This was an integral part of Guevara’s conception of work as a social duty.

In the first bimonthly meeting, Juan Valdés Gravalosa reported that the quality of production in the industries operated by MININD had declined. This had political implications, he said, as the population was dissatisfied.¹²⁴ In September 1962 Guevara told MININD directors that:

‘Increasing production for the sake of it and throwing quality out the window is absurd. If we make two million pairs of shoes and we sell them at the same price and in four days the shoes are useless, we have gained nothing, because the shoe has to complete a social function and

¹²² Borrego, *Camino*, 104. Author’s emphasis.

¹²³ Guevara, *Bimestrales*, 9 May 1964, 470. The slogan was thought up by Castillo, a publicist before 1958 who worked in quality control in MININD.

¹²⁴ Valdés Gravalosa, *Bimestrales*, January 1962, 161.

that is our main duty, to produce so that people can dress, they can eat, they can live in society.'¹²⁵

Guevara met with the workers from the Office of Measurements and Quality Control to discuss production controls and new products being developed. Borrego recalled one occasion when the director of the EC of Textiles asked Guevara's opinion of a new print design for women's clothes. He replied:

'Do you believe that I should be in charge of deciding how the women of this country should dress? I refuse to give my opinion about this design. It is up to the specialists and designers to decide this issue. The worst thing that could happen to the women in Cuba is that a minister decides what clothes they should wear. If I say that I like the colour red, does that mean that all the women should go around dressed in red?'¹²⁶

By May 1964, MININD had made substantial progress with basic production. Guevara said that directors must focus on quality. On a recent trip to Czechoslovakia, he said, he had passed through Switzerland and France:

'One of the things that most impressed me is the profound revolution in the production system, in the concepts of production, and in the enormous respect there is for quality in the capitalist countries, which is reflected in the market. Czechoslovakia is perhaps one of the countries which has the highest quality within the socialist system. Now, the difference with Switzerland, for example, is extraordinarily marked. Naturally, in Switzerland you immediately see all the blights of capitalism, but I am not interested right now in referring to the blights of capitalism which we all know; the important thing is the issue of quality.'¹²⁷

¹²⁵ Guevara, *Bimestrales*, September 1962, 308-9.

¹²⁶ Borrego, *Camino*, 311.

¹²⁷ Guevara, *Bimestrales*, May 1964, 470.

Guevara said that there were two obstacles to attaining quality in production in Cuba: firstly, problems obtaining materials, because of the blockade and other objective conditions; and secondly, a lack of discipline, with too much focus on quantity at the expense of quality. He reeled off examples of faulty goods: a trouser zipper that does not close; a child's ugly doll; shoes held together with just two nails; bad quality shampoo, hair lotion, blusher, sold at a profit. He indicated that a representative from the Ministry of Foreign Trade was present, as this was a problem for that institution too. Quality norms were being implemented in pilot factories, he said, and warned that blaming the low quality of raw materials was not an excuse not to prioritise quality control.¹²⁸

Capitalist competition, stated the *Manual*, generated the need for constant quality control. In Cuba, planning had replaced competition and consumer choice was no longer a controlling mechanism. The apparatus of quality control was therefore vital: 'Buyers acquire what is sold because they have money and they do not find anything better; or worse, they acquire an item which is regular or bad, but for the price of one that is good, obliged by the circumstances. This is immoral and cannot be permitted in a socialist country.'¹²⁹ Each production unit had a worker responsible for quality control and the *Manual* instructed administrators to support that work, noting that the existing quality control was terrible and had caused economic losses for the nation.¹³⁰ Quality standards were part of the economic-technical plan and could not be changed by administrators.¹³¹

Guevara's emphasis on quality control was linked to other concepts in BFS: the aspiration to use the most advanced technology, the conviction that socialism should be a superior mode of production to capitalism, more efficient and productive and that man must be at the centre of the socialist system, the purpose of production being his spiritual and material satisfaction.

¹²⁸ Guevara, *Bimestrales*, May 1964, 470-5.

¹²⁹ *Manual*, sección 9, asunto 2, página 1.

¹³⁰ *Manual*, sección 9, asunto 2, página 2.

¹³¹ *Manual*, sección 4, asunto 7, página 3.

MODEL ENTERPRISE

In September 1964, Guevara announced that the capacity for data analysis in MININD had improved to the point where it could be called statistics, but not to the point of real economic or technological analysis. He announced projects underway to study and improve the MININD apparatus. To assist him he established a small Department of Advisors, under the leadership of Valdés Gravalosa, which would carry out whatever analysis or other projects were deemed necessary. This included weekly tasks set by the Management Council meetings, of which Valdés Gravalosa was secretary. The team was also set the task of studying the 'problems of socialism.'¹³² The group of advisors consisted of Valdés Gravalosa, Alberto Mora Morales, Harold H Anders, Carlos Franco Canillas and Evelio Horta. As head of the Office of Organisation, accountant Harold Anders would also be studying the perfection of methodology and organisation in MININD. Meanwhile specialists in industrial engineering, maths, linear programming, operational calculus would help to give integral and concrete guidance to the ECs: 'What's needed is a stronger central apparatus that really can guide and lead the enterprises and the restructuring of key levels of the ministry so that internal bottlenecks in information don't occur and decisions aren't impeded because of failures in the method of communication.'¹³³

A longer term project for the Department of Advisors was to study the optimal conditions for an enterprise, its functions, organisation, and administrative principles. In April 1965, they completed a manuscript called *Report on the Elements Required to Create a Model Industrial Enterprise and the Methods of Work that Should be Applied in Distinct Areas of Activity*. Guevara sent Valdés Gravalosa with one of his bodyguards to have eight copies printed. The prologue to the book stated:

'The present work attempts to outline the functions and methods that a consolidated enterprise should use to reach a grade of efficiency that will

¹³² Valdés Gravalosa, interview.

¹³³ Guevara, *Bimestrales*, September 1964, 542.

serve as a model for all. The level of efficiency attainable is, naturally, intimately linked to the existing organisational and economic conditions in the country.’¹³⁴

The manuscript divided the work of the EC into four areas: economic, technical-productive, administrative and those related to the director. The manuscript was terminated just days before Guevara left Cuba for his secret military intervention in the Congo. Without his instructions more copies of the book were never printed. Therefore it was never applied or introduced as a model. It is not clear what Guevara saw as its function, whether it was to serve as an equivalent to the administrators’ *Manual* for the ECs in MININD, but it contains a comparable mix of management theory with practical guidelines for overseeing the factories under the EC jurisdiction; factory visits, daily reports, coordination in planning, maintenance, contracts for product delivery, Arbitration, quality control, storage and inventory control, investment, accounts and audits, and so on.

CONCLUSION

‘When we started the organisation of the ministry, against all the advice we had, against all the guidelines from the socialist countries, we created two offices that the advisors contested: the management of organisation and the management of inspections. These offices were shown to have fundamental importance for a period.’¹³⁵

The BFS began as an administrative measure to deal with the situation created by the nationalisation of industry. Centralising the funds of all production units and controlling them from the ministry according to political-economic objectives was the first step towards implementing administrative control of the industry.

¹³⁴ Ministerio de Industrias, *Informe Sobre los Elementos Requeridos Para Crear una Empresa Industrial Modelo y de los Métodos de Trabajo que Deben Aplicarse en los Distintos Frentes de Actividades*. La Habana, 15 April 1965, Preámbulo.

¹³⁵ Guevara, *Bimestrales*, July 1964, 488.

Meanwhile, Guevara studied the management and accounting operations of the highly productive and efficient capitalist corporations. His study of Marx, particularly *Capital*, forged his conviction that it was necessary to undermine the operation of the law of value and replace capitalist mechanisms with purely administrative ones. Throughout his leadership of MININD, Guevara constantly searched for the appropriate levers to implement administrative compulsion. The first obstacle, however, was the absence of an economic culture, elementary statistical knowledge or even recognition of the importance of data collection at the base level of the production units. However, even while Guevara battled for basic numerical literacy he was already introducing computer-based input-output matrices and experimenting with the possibilities for introducing the automation of national income accounting. He imposed this vision on his colleagues, underlining the importance for production of economic analysis in real time. Production problems must be detected immediately and measures taken to overcome them. For this dual agenda, Guevara surrounded himself with experts, determined to harness their knowledge regardless of their ideological position. Administrative control ensured the primacy of planning, undermining the law of value in the transition to socialism; supervision was a tool to monitor and enforce this; investment was a necessary precondition to expand production, improve productivity and efficiency. Without this apparatus, the BFS would have no meaning.

CHAPTER 8

Collectivising production and workers' participation

*'...the workers will participate in the management of the factory through trade union action, discussion of the Technical-Economic Plan, emulation, the innovators' movement, Production Assemblies and in the councils established for these ends... The factory belongs to the people, the State, that is to say, to the workers; the administrator is nothing more than the agent of the State, a servant of the people... As we approach communism the participation of the workers in the management of production will expand, the role of the collective in finding solutions to the most important questions of work in the plant or in the factory, will constantly increase.'*¹

Under socialism the law of value is to be increasingly substituted by the plan as a means for determining production and consumption decisions. In a country in transition to socialism, particularly one in conditions of underdevelopment, measures have to be implemented to increase productivity and efficiency. Without reliance on capitalist levers, particularly individual material incentives, new mechanisms must be found to encourage greater worker effort and create incentives to innovations and the rationalisation of production. The plan sets worker production 'norms', based on socially necessary labour time, but workers are urged to surpass these in order to increase economic efficiency. The challenge in the period of transition is to transform the value added to production by the worker above his own subsistence from surplus value into surplus product; from production for exchange, to production for use. The value added in production by the worker is not the product of exploitation, but a contribution to social production, which is distributed according to

¹ Ministerio de Industrias. *Manual Para Administradores de Fábricas*, 10 June 1964, 2nd ed. La Habana, 1988. Sección 2, asunto 10, página 1-3.

criteria determined by the plan. Under capitalism, workers' surplus value is the product of exploitation, because it does not belong to them. Under socialism, it is a contribution to social production; they work for themselves as part of a collective society. Workers management means workers' ownership of the means of production. The masses must participate collectively in devising the plan, establishing the norms and in daily decisions concerning production and consumption. This chapter examines the mechanisms developed by Guevara within the Ministry of Industries (MININD) to collectivise production and workers participation to give socialism the democratic, participatory character necessary to prepare society for a transition to communism. As Guevara said: 'the government and the working class cannot be separated under the dictatorship of the proletariat.'²

The Revolution had major objective conditions to overcome: conditions of underdevelopment and dependency, the exodus of managers and technicians who had run the economy and the low educational and skill level of the masses. The apparatus created in MININD aimed to tap into the creative energy of the working class in finding solutions to production problems: rationalising production, lowering costs, raising productivity, technological innovations, and generally developing the productive forces in Cuba. Obstacles to the integration of workers into management post-1959 included the 'economistic' tendencies of the organised labour movement – years of battling to secure crumbs from the capitalist table had resulted in a loss of class consciousness.³ Furthermore, the working masses were so accustomed to having the production process imposed upon them that it was difficult to convince them that they owned the means of production and could influence technological and managerial decisions. This manifested as inertia, a slow acceptance by workers of the idea that they had a stake in the progress of development. Orlando Borrego, First Vice Minister in MININD said that Guevara complained in Management Council meetings about this reticence:

² Guevara, 'Reuniones Bimestrales', 14 July 1962, Ministerio de Azúcar, *El Che en la Revolución Cubana: Ministerio de Industrias*, Tomo VI. La Habana, 1966, 267.

³ See chapter 6.

'Che questioned why important tasks that were the direct responsibility of the working class always emerged as "bureaucratic" initiatives. He pointed to the examples of the *technical minimum* and *worker improvement* [courses] that were born as initiatives of the Ministry of Industries and not from the workers organisations. *Why were the initiatives born above taken to the roots where they should have been born to be taken to the entire working class?*⁴

Inertia was also the result of hierarchical notions. Workers on the 'shop floor' did not identify with the need to resolve management problems. Guevara told MININD directors that they must constantly approach the masses to discuss and argue fraternally with them in order to create a new spirit and understanding:

'...that the duty of leaders does not exclude the duty of coordinated and harmonic work, the working class has to be preparing itself to take up management work in the shortest time possible and the more that we can decentralise and create work habits independent of any material incentive, and independent of any administrative pressure, the quicker we will advance.'⁵

Such patterns of behaviour, nurtured under capitalism, were difficult to break, particularly as Guevara argued strongly that new social relations and new ideas could not be imposed, but must be encouraged and fostered organically. He said:

'...you cannot change how people think by decree. People have to change their way of thinking by their own conviction and the best way to change their way of thinking is to demonstrate the capacity for sacrifice of the true revolutionaries, the capacity to help a *compañero*, the capacity to do concrete things through the collective and by the individual, that shows that members of a revolutionary organisation have not acquired

⁴ Borrego Díaz, Orlando. *El Camino del Fuego*. La Habana: Imagen Contemporánea, 2001, 226. Emphasis in original. Borrego's italics.

⁵ Guevara, *Bimestrales*, July 62, 306.

any type of extra rights, what they have acquired are duties that they have to complete.⁶

Guevara was not insinuating that none of the MININD personnel were working class, but rather that the mass of workers were not integrating themselves enough into the management apparatus and therefore the process of development was not being directed by the working masses. This was in the first years of the formulation of the Budgetary Finance System (BFS). As this problem was identified, apparatus to promote the collectivisation of production and workers' participation was integrated into the BFS, which viewed all production units in Cuba as part of one big factory. The state was owner of the factory, that is, of all the means of production in Cuba, and the working masses were responsible for the management of that factory. Guevara said:

'The economy as a whole is considered to be one big enterprise and we attempt to establish collaboration between all participants as members of a big factory, instead of being wolves among ourselves within the construction of socialism.'⁷

Eight months after MININD was established in February 1961, Guevara gave a decisive speech to MININD workers on the issue. Borrego recalled: 'the Minister submitted himself to such extensive self-criticism that we were all surprised.'⁸ Guevara began by explaining that he had been assigned the job of Minister because of his revolutionary track record. The problem was that he had transferred concepts applied to the guerrilla campaign to the ministry: treating people as soldiers, commanding strict discipline and a lack of discussion. He had realised this mistake when witnessing Fidel Castro's capacity to establish direct contact with people, to discuss with everyone. He admitted: 'I do not know a single cabaret, nor a cinema, nor a beach... practically never have I been in a family house in Havana, I do not

⁶ Guevara, 'Charla a los trabajadores del Ministerio de Industrias', 6 October 1961, in *Ernesto Che Guevara: Escritos y Discursos*, tomo 5. La Habana: Ciencias Sociales, 1977, 298-9.

⁷ Guevara, *Bimestrales*, 21 December 1963, 413.

⁸ Borrego, *Camino*, 175.

know how the Cuban people live, only in statistics, numbers or summaries...' He assured the workers that measures would be taken to make MININD more humane, 'so that they feel part of a great collective effort that the nation must make and so we can be as integrated as possible in making this effort, every one with their own varied way of thinking, and with their own varied convictions, but trying to incorporate them into work that is alive...' ⁹ The policies cited below, some of them formulated before that speech, were measures taken to initiate that dynamic process of integration. The apparatus examined was in addition to trade union and other organisations of the masses and the peoples' militias, operational in every MININD entity throughout the country, which also served to forge a collective responsibility guarding production against sabotage and terrorism. Additionally, two of the most important projects for collectivising production and workers' participation, voluntary labour and socialist emulation, are not included in this chapter. ¹⁰

BIMONTHLY MEETINGS

The first bimonthly meeting took place in January 1962, attended by the Management Council and all directors in the central apparatus: directors of the Consolidated Enterprises (ECs), their heads of production and economic heads, directors from the ministry's provincial delegations, directors from the science and technology research institutes, advisors, and other invited guests: approximately 400 people. These meetings were a vital tool for ensuring ideological and structural cohesion. Each meeting had set themes, which the directors themselves could propose. They gave directors the opportunity to raise their own queries, ideas or complaints. It is clear from the meeting transcripts that they used this opportunity.

⁹ Guevara *Charla*, 293-4.

¹⁰ See chapter 10.

PUBLICATIONS

MININD had three publications; *Nuestra Industria* [1961], *Nuestra Industria Tecnología* [1962] and *Nuestra Industria Económica* [1963]. Juan Valdés Gravalosa, was editor of *Nuestra Industria* and it was his idea to produce the journal in A5 size, similar to the US magazine *Readers' Digest*. Valdés Gravalosa sent the first draft to Guevara to look over before publication. He said: 'The only time that Guevara's complained about the journal was when his photo appeared in one issue four times. I never put in a photo of him again!'¹¹ Produced by a team of seven, 35,000 copies of the journal were printed monthly by MININD's EC of Graphic Arts and with paper made from Cuban sugar cane *bagazo*, and it was sent to every MININD production unit in the country.

Examining just one issue of *Nuestra Industria* from January 1963 demonstrates how the magazine was designed to create a sense of the collective among the huge and diverse production units in MININD and forge ideological and structure coherence. The following headings serve as examples of the content and tone of the publication: 'An award you would not change for anything in the world' – for a worker of 20 years industrial service, nominated by his colleagues, who built a machine to manufacture staples *en masse*; 'List of the factories that are behind' – examples and descriptions of the problems and administrative failures discovered; citation from Lenin: 'How to organise emulation'; 'Combatants of production' – six workers commended with comments like 'watching out for the security of his industry' and 'designed an apparatus to be adapted to the landings'; 'The most outstanding workers' – 82 workers who contributed to an increase in production; 'Most outstanding technicians' – two named with photos. On the back page was a diagram with arrows running between minister, first vice-minister, vice-minister of production, director of the branch, director of the EC, to the factory, and a finally a man in dungarees, with the words: 'Your work centre is a solid link in the great chain of production of the Ministry of Industries.'¹²

¹¹ Juan Valdés Gravalosa, interview, 22 February 2006.

¹² *Nuestra Industria*, Revista de Ministerio de Industrias, Año 3: No 1 (Enero 1963).

Vice Minister of Technical Development, Tirso Sáenz, was responsible for publishing *Nuestra Industria Tecnología*, but it was edited by María Teresa Sánchez, head of the Department of Scientific-Technical Information.¹³ Produced for MININD technicians, it was very specialised. For example, the August 1963 edition contains an article by a Hungarian engineer Pal Mihalyfi, on the analysis of production, including graphs and complex econometric equations. Other articles concern: sugar crystallisation; chromatographic analysis of colorants for synthetic fibres; 'derivatography', a modern Hungarian method of thermo analysis; installations of capacitors in electric circuits; the increase of production with open-heat furnace by means of enrichment of the flame with oxygen, an article translated from the magazine *Iron and Steel Engineer*; an article about documentation and searching for information by Sánchez, and over 20 pages with tables of technical norms.¹⁴ Clearly this was for a more limited audience than the first ministry magazine. It reflects the rising technological level within the ministry, the presence and collaboration of technicians from the socialist bloc and the effort to keep abreast of developments in the capitalist countries. Guevara was the editor of *Nuestra Industria Económica* and Miguel Figueras, director of the Perspective Plan in MININD, sub-editor. This was the vehicle for the theoretical articles which constituted part of the Great Debate.¹⁵

The MININD publications served several vital functions: linking education to production; forging a collective concern to national production - Cuba as one big factory; disseminating information about technological innovations; as a vehicle to ensure the ideological and structural cohesion of the BFS throughout the production units; and as a means for Guevara to communicate his ideas about socialist transition and generally raise the political understanding of workers at all levels. These objectives were also encapsulated in the *Manual Para Administradores de Fábricas* (Manual for Factory Administrators) discussed below.

¹³ María Teresa Sánchez, interview, 8 March 2006.

¹⁴ *Nuestra Industria Tecnología*, Ministerio de Industrias, Año 2: No 8 (Agosto 1963). Mihalyfi devised a system for organising production to increase productivity by rational utilisation of the working day. Plan Mihalyfi was applied in the metallurgy branch and the heavy mechanics branch.

¹⁵ Miguel Figueras Alejandro, interview, 27 January 2006. See chapter 5 for citations from articles written as part of the Great Debate.

Manual for Factory Administrators

Published in June 1964, the *Manual* collated Ministry directives in a manuscript which combines theoretical explanations of the importance of collective production and workers' participation with the policy procedures applied to this end. Some examples follow. Section five: the technical-economic management: the administrator must: 'be convinced of the incalculable source of inexhaustible ideas, inventiveness, practical knowledge, etc that is latent in each one of the factory workers and establish a more adequate and effective system to make use of these resources.'¹⁶ When involving workers in efforts to constantly reduce the costs of production: 'success will mainly depend on the understanding and conviction of all the factory's workers of the need of this attitude and the collective benefits that will be derived from it'.¹⁷ Section seven: organisation, effective work methods and administrative techniques: 'In all the decisive sectors of production, the Soviets have started to work in accordance with the principle known as "CONVENTIONAL FORMULA OF 1 + 1". The objective is the following: "transmit the experience you have gained to others immediately.'¹⁸ This knowledge sharing is directly linked to an increase in productivity. Section eight: training; the importance of respect and courtesy between the administrator and their assistant trainee, and from the assistant to others in the production unit and outside.¹⁹ Section ten: communication; the aspirations or criticisms of workers must be considered in all forms of communication. This fosters emulation, encourages workers to feel that they are participating in management, helps them to accept changes to the past system, avoids a lack of knowledge being an excuse for incompleteness of tasks, assures uniformity in application and allows projections into the future.²⁰

Immediately after the Revolution, stated the *Manual*, bureaucratic roles were designated without analysis. Old structures remained intact along with a certain inertia and disdain for the political changes that were a necessary prelude for

¹⁶ *Manual*, sección 5, asunto 10, página 1.

¹⁷ *Manual*, sección 5, asunto 10, página 1.

¹⁸ *Manual*, sección 7, asunto 9, página 1.

¹⁹ *Manual*, sección 8, asunto 2, página 1-2.

²⁰ *Manual*, sección 10, asunto 1, página 1-3.

transformations of the economic structure. The nationalisations of enterprises and the *brain drain* of specialists, led to a scarcity of administrative and technical personnel for management roles: 'We all filled our roles as well as we could, but not without embarrassments and difficulties. Many mistakes were committed by the administration of the state apparatus, enormous errors were committed by the new administrators of enterprises, who had responsibilities too big in their hands.'²¹ Consequently, cadre policy became synonymous with a policy toward the masses: an apparatus that would both connect with and educate them. The label 'cadre' indicated anyone in leadership position, whether that was in production, managerial, technical or political. Leadership positions entailed more responsibility and commitment, and therefore, greater dedication to the revolutionary project. Cadre were the political vanguard. The *Manual* reproduces Guevara's September 1962 article *Cadre: Backbone of the Revolution* to explain his concept:

'We should state that a cadre is an individual who has achieved sufficient political development to be able to interpret the larger directives emanating from the central authorities, make them his own, and convey them as an orientation to the masses: a person who at the same time also perceives the signs manifested by the masses of their own desires and their inner-most motivations.'²²

In addition, a cadre has to have discipline, practice collective and individual decision making and responsibility, be of proven loyalty who will face any debate and give his life for the Revolution, exercise creative initiative without conflicting with discipline. A cadre is exemplary, but encountered daily among the Cuban people: a creator, a leader, a technician with knowledge of Marxist theory and responsibility for his actions, a good political level who by reasoning dialectically can advance his sector of production, or develop the masses from his position of political leadership. Cadre must be selected from among the masses: political cadre, the foundation of mass organisations; military cadre, the young combatants who were tested under fire

²¹ *Manual*, sección 2, asunto 9, página 1.

²² *Manual*, sección 2, asunto 9, página 1.

but need theoretical knowledge; and economic cadre, dedicated to the difficult tasks of planning and organising the socialist state. They know how to harness the knowledge of existing professionals. They should be encouraged to pursue technical careers, to give science the energy of ideological enthusiasm that will guarantee accelerated development. Cadre must have political clarity, with reasoned, not unthinking support for the postulates of the Revolution:

‘It requires great capacity for sacrifice and the capacity for dialectical analysis, which will enable them to make continuous contributions on all levels to the rich theory and practice of the Revolution. These *compañeros* should be selected from the masses solely by application of the principle that the best will come to the fore and the best should be given the greatest opportunities for development... The cadre... is not simply a transmitter of slogans or demands upward or downward, but a creator who will aid in the development of the masses and the information of the leaders, serving as a point of contact between them... there are no better cadre than those chosen by the masses in the assemblies that select the exemplary workers.’²³

Guevara cites the Revolution's programmes underway to develop cadre: scholarships, workers study programmes, technical development courses, training schools, broadening general and university education access. The key institution in the formation of cadre, he said, was the Union of Young Communists. The United Party of the Socialist Revolution (PURS, from 1965 the Cuban Communist Party) would start as a small party with enormous influence over the worker, but would grow with the advance of socialist consciousness.²⁴ Borrego said the aspiration was to change the numerical relationship between the mass and the vanguard so that as more individuals reached adequate political and technical levels, the nucleus would grow until it incorporated the masses.²⁵ In March 1962 Guevara told MININD directors that:

²³ *Manual*, sección 2, asunto 9, página 2-3.

²⁴ *Manual*, sección 2, asunto 9, páginas 1-3.

²⁵ Borrego, *Camino*, 182.

'The Revolution has to be made at a furious rhythm, those who tire have the right to be tired, but they do not have the right to be in the vanguard. Therefore we need to go to the factories, we need to converse with everyone, investigate the problems there are, promote free, open discussions, without any form of coercion...'²⁶

To facilitate this free and open discussion in MININD it was necessary for managers and administrators to be in contact with the workers at the site of production. Guevara argued that this was essential in order to avoid bureaucracy and to improve their knowledge of the functioning and problems in the productive units.

FACTORY VISITS

EC Directors in MININD were expected to visit the enterprises under their jurisdiction fortnightly. This involved meeting with the administrator, heads of production and economic heads and the representatives of the mass organisations: the party, UJC, trade unions, and any other groups in those entities, and talking to workers and technicians in the production process, discussing problems and initiatives, checking inventories and storage and employee facilities. Vice Ministers were also obliged to visit production units fortnightly. Ángel Arcos Bergnes said that as MININD grew Guevara complained that this task was not being carried out. He warned that this would lead to a separation of the management and from the grassroots. A Commission was formed to produce a guide for factory visits.²⁷ Under the new regulations any member of MININD's Management Council not carrying out fortnightly visits would have three days salary docked with the threat of substitution.²⁸ They had to produce a detailed report following each visit which included concrete recommendations for improvements. Juan Valdés Gravalosa, secretary of the Council was responsible for programming the visits and ensuring the

²⁶ Guevara, *Bimestrales*, 10 March 1962, 176.

²⁷ Ángel Arcos Bergnes, *40 Aniversario Ministerio de Industrias*. La Habana: Editora Política. 2001, 30.

²⁸ This never happened because visits were completed.

vice ministers did not visit the same place twice and that they rotated on visits to the provinces. He said: 'Che read the reports from the factory visits. They had an index, a check list. For example, you arrive at the warehouse; you have to check the inventory cards.'²⁹ Arcos pointed out that Guevara was exemplary in fulfilling this obligation. He recalled: 'Once during the missile crisis of October 1962, Che had been all weekend in Pinar del Río (western Cuba, where he was Rebel Army commander responsible for organising defence of the island), he arrived late to the Management Council on Monday morning. It had been said that he would not have been able to complete the report from a factory visit, but Che pulled out a report, apologising that it was not typed up because the pressure of the situation meant that he had no secretary in Pinar del Río. He had visited the pencil factory at Batabano.'³⁰

The *Manual* instructed administrators to visit the workshops in their factories or production units:

'If we visit the workshops in a pressured way we will never derive benefits from these visits, they should not be done because of the simple fact of completing a directive, but with the ends of obtaining from the visits new ideas to improve the activities and to listen calmly and with interest to the suggestions and criticisms of the workers.'³¹

The factory visits provided an opportunity for thousands of workers to meet and discuss with the administrative and management personnel of MININD, including with the Minister. Harry Villegas, Guevara's military escort, said factory visits and conversations with the workers: 'was a link with the masses which gave him an exhaustive command over the reality of the activity in the sphere which he led.'³² Guevara's talks in the bimonthly meetings are peppered with references to his experiences and encounters during these factory visits.

²⁹ Valdés, interview.

³⁰ Arcos, interview, 8 December 2004. Other Management Council members related this story.

³¹ *Manual*, sección 7, asunto 2, página 10.

³² Harry Villegas Tamayo, interview, 22 March 2006.

1960 COMMITTEES FOR SPARE PARTS

*'Among Che's most acknowledged achievements were results in the production of spare parts, an objective which was possible thanks to the creation of the Committees for Spare Parts, which, organised from the base up to the ministry and by means of an enthusiastic emulation, resolved the most serious problems that arose, avoiding the paralysis of industry.'*³³

As stated in chapter 7, before the Revolution, 95% of capital goods in Cuba came from the US and 100% of spare parts.³⁴ In the context of the US blockade and the shift of 80% of Cuba's trade from the US to the Soviet Bloc, the problem of spare parts was acute. The island struggled to replace machinery parts worn out in production. Before the Revolution, Cuban or foreign managers in Cuba could telephone orders to the US for replacement parts or technical assistance which would arrive in Havana on a shuttle boat within two days. There was no culture of stockpiling for future security, so even before its imposition when the blockade was anticipated, managers did not stock up on spare parts. The fact that the Committees for Spare Parts were the first workers' committees established testifies to how rapidly spare parts became a central issue for production in Cuba.

The Committees were set up in 1960, however, over the following years Guevara continued to complain about problems related to spare parts: factory administrators waited until machinery parts were totally worn out before ordering mechanics to make them. Production was paralysed during the wait for delivery. Parts were ordered separately instead of in bulk which would be cheaper and build reserves.

By August 1961 Guevara said the Committees had given marvellous results, not just

³³ Borrego, *Camino*, 164.

³⁴ Arturo Guzmán Pascual, 'La Acción del Comandante Ernesto Guevara en la Campo Industrial' *Revista Bimestre Cubana*, No 8 (1998), 29.

in solving production problems, but also in constituting the first campaign of emulation in production, achieving effective contact with the mass of workers:

‘...with the emulation of everyone and with the effort of all the workers in all the factories of the country, they have resolved innumerable problems. To such an extent that the Higher Committee of Spare Parts, at the ministerial level, has only addressed the problems that could not be resolved at various levels... The work is still not organised but it is improving all the time, as are our aspirations and it is one of the achievements that the Ministry can show with pride, and naturally, it is not an achievement of the Ministry, rather it is the achievement of the communication with the mass of workers, so that the participation of the mass of workers is fundamental for the management of the country.’³⁵

Guevara lamented that the first Cuban trade mission to the Soviet bloc, which he led, had not had the foresight to purchase a factory of spare parts.³⁶ Clearly, the Committees were vital in bridging that gap to keep production going.

By late 1962 the First National Exhibition of Spare Parts of the EC of Petroleum, took place in Havana. *Nuestra Industria* reported that: ‘The exhibition shows some 500 parts of diverse types such as: electrodes, axles for pumps, mechanical equipment for various uses in the petrol industry, machines...all built in the workshops of the refineries “Hermanos Díaz” in Santiago de Cuba and “Ñico Lopez” in Havana and including a varied collection of components manufactured in different terminals of the Republic.’³⁷ The same issue carried photos of ‘Equipment and parts built by the workers of the refineries J A Echeverría.’³⁸ The quantity and diversity of spare parts manufactured and displayed in just this one issue of *Nuestra Industria* is evidence of the degree of success of the Committees for Spare Parts.

³⁵ Guevara, ‘Discurso de la Primera Reunión Nacional de Producción del MININD’ in *Escritos*, tomo 5, 218.

³⁶ Guevara, *Bimestrales*, July 1962, 289.

³⁷ *Industria*, enero 1963, 55.

³⁸ *Industria*, enero 1963, 62-78.

1961 MOVEMENT OF INVENTORS AND INNOVATORS

When the Department of Industrialisation was set up dozens of inventors and innovators arrived at the offices to demonstrate their creations. Orlando Borrego recalled that a new section had to be created in the department to deal with the quantity of products:

‘They appeared in abundance forming the most diverse range of specialities and levels of qualification. Among those there were technical engineers of middle level qualification or people of low educational levels but with amazing intelligence. The most ingenious ideas imaginable had occurred to them. Most of them appeared with prototypes or miniature models which awoke a curiosity in children and adults alike.’³⁹

The collection served as an improvised exhibition within the department: ranging from aeroplanes for the Revolutionary Armed Forces; to cutters, cane retrievers and storage centres for the sugar cane harvest; to air-conditioning compressors; and even a machine to generate electricity from sea currents. The inventions and innovations revealed the limitless imagination of the population, but also the extent that talents were wasted for want of technical training. Borrego nostalgically recalled that: ‘the exhibition served as an occasional nocturnal distraction for those of us that worked in the Department. Many nights we would meet in front of the exhibition to enjoy those miniature apparatus. There was no lack of those who returned to their infancy and played on the floor with the small automobiles or the miniature locomotives...’⁴⁰ When MININD was set up in February 1961, the Department of Inventions and Innovations was part of the Office of Norms and Metrology, under the jurisdiction of the Vice Minister for Technical Development.

³⁹ Borrego, *Camino*, 12.

⁴⁰ Borrego, *Camino*, 12.

The *Manual* stated that: 'the work of Inventions and Innovations is of vital importance for the technical development of factories, because it constitutes one of the bases which should help the Administrator to achieve an increase in the production and productivity of the factory.'⁴¹ It described the function of the Department of Inventions and Innovations as leading and coordinating the development of the movement of inventors and innovators and their industrial application in coordination with the ECs and the trade union organisations.'⁴² The *Manual* said these objectives would be further embedded in the production units with the establishment of a new policy to create teams of 'factory cadre', one member of which would be responsible for inventions and innovations: 'registering all the inventions achieved by the workers, in order to revise and determine which could have general industrial application. Afterwards, they will systemise the inclusion of the corresponding inventions in the economic plans of industrial development.'⁴³ Inventions were to serve important industrial functions.

Guevara gave special attention to the movement of inventors and innovators, interviewing the designers of the most promising projects presented. Borrego said:

'No-one could have imagined back then that as the years went by this movement would become an organised force that would allow us to solve innumerable technical problems that we faced in the country's industry after nationalisation. From the evaluation of those projects, some that appeared to be mere dreams, would emerge very quickly great technological solutions for the development of agriculture and industry in Cuba... The movement of inventors and innovators included the whole country and its enduring push has lasted till today on a par with the growth of the development of science and technology attained in the years of the Revolution, representing millions saved by the most diverse machinery, equipment, spare parts and other products for specific sectors

⁴¹ *Manual*, sección 9, asunto 3, página 3.

⁴² *Manual*, sección 9, asunto 3, página 3.

⁴³ *Manual*, sección 9, asunto 3, página 3.

of the economy, including the scientific sector and the public health sector of the country.⁴⁴

Guevara, however, had always been convinced that the product of workers' experimentation, a reflection of their commitment to production, could be applied to improve production techniques. In October 1963 Guevara told MININD directors that: 'technicians naturally have to work in the area of research, and from this task of research will arise, perhaps, new things which will have to be respected, that are going to totally change economic concepts.'⁴⁵ The social utility of individuals' inventions was significantly enhanced by the absence of market mechanisms, such as copyrights and intellectual property rights, which would have added to the social costs of such developments. Individuals were motivated by moral incentives, vanguard status and social applause in the realisation and application of their inventions and innovations.

Cubans have acquired an international reputation for their resourcefulness and their ability to commit human and material resources in order to find solutions to the most acute problems of the moment. The movement of inventors and innovators has evolved into the National Association of Innovations and Rationalisers today in Cuba. Beyond this institutional form, the daily inventions that Cubans create to overcome shortages and maintain old equipment have become embedded into national culture and generically celebrated as '*inventos*'.

1961 ADVISORY TECHNICAL COMMITTEES

'...practically none of the administrators possessed the necessary technical level or experience in production of the factory they were leading. The [Advisory Technical] Committees were supposed to study solutions to the serious problems of spare parts and propose measures in

⁴⁴ Borrego, *Camino*, 12-13.

⁴⁵ Guevara, *Bimestrales*, 22 February 1964, 402.

relation to the rationalisation of the production process and the increase in work productivity'.⁴⁶

Chapter 4 of this thesis illustrated how, with the nationalisation of industry, Cubans were nominated as administrators for their loyalty to the revolutionary process, despite their often inadequate skills and experience in management. In this context, Guevara searched for institutional forms to engage the mass of workers, those with years of experience of the production processes, to assist the administrators in the task of rationalising production, reducing costs and improving technology. Advisory Technical Committees were set up at all management levels from the factory or production unit to the consolidated enterprise. The most outstanding workers were selected by the administrator or director to form a Committee to advise them on practical measures to improve production. Usually around 10% of the employees could be on the Committee. In larger production units they were organised into sub-committees to focus on specific problems. Borrego explained:

‘Their principal function was to direct the discovery of productive reserves to accelerate production, and to advise the administrator or director of the enterprise in their technical functions with the same objective, to propose ideas in order to improve work conditions and safety in factories, to facilitate a closer relationship between the worker and the management of production and to generally help resolve the complicated problems that occurred as a result of the imperialist enclosure and the blockade imposed on the economy of the country.’⁴⁷

Guevara believed that if the Committees were selected from the most dedicated and knowledgeable workers they would both improve the conditions and productivity of production process and the integration between the working class and the management. Borrego pointed out that the Committees demonstrate that Guevara did not distinguish between the technical and revolutionary tasks of the working class.

⁴⁶ Sáenz, Capote and Taupier, *Aniversario*, 79.

⁴⁷ Borrego, *Camino*, 110-111.

Participants in the Committees were encouraged equally to find important technical solutions to production problems, replacing imports and producing much needed spare parts, as they were to constitute a revolutionary vanguard, inspiring the mass of workers with their engagement in production.⁴⁸ Guevara himself said: 'The Advisory Technical Committee is, then, a laboratory experiment where the working class prepares itself for the great future tasks of the integral management of the country.'⁴⁹

Sáenz affirmed that: 'They were really useful tools for management'⁵⁰ and compared Guevara's Committees to the quality committees set in Japanese industry to study solutions for production problems. Guevara had visited Japan in 1959 during his seminal trade mission as the head of the first Cuban delegation overseas after the Revolution, although these Japanese committees are not mentioned in his published report on the visit.⁵¹ Omar Fernández, on the other hand, claims that Guevara saw similar Committees functioning in Yugoslavia.⁵² The fact is that new administrators had often relied on experienced workers to maintain and improve production from the tumultuous days of the nationalisations.⁵³ Guevara's efforts to exploit the knowledge of professionals and technicians, regardless of their ideological commitments are evident throughout his work. The Advisory Technical Committees engaged technicians, not just solving production problems, but also politically, in the conscious effort to bring productivity and efficiency to a planned economy.

⁴⁸ Borrego, *Camino*, 213.

⁴⁹ Guevara, 'Discusión Colectiva; Decisión y Responsabilidad Única' in Guevara, Ernesto Che. *Obras 1957-1967*, tomo 2, La Habana: Casa de Las Americas, 1970, 127.

⁵⁰ Tirso Sáenz, interview, 7 January 2005.

⁵¹ Guevara, 'Recúperese Japón de la Tragedía Atómica', *Verde Olivo*, 19 October 1959, from <http://cheguevara.cubasi.cu>.

⁵² Omar Fernández Castiñares, interview, 2 March 2006.

⁵³ Chapter 9 has details.

1961-2 PRODUCTION ASSEMBLIES

*'...the Production Assemblies will be part of the life of the factories, and will be an armament that the working class have in order to audit the work of their administration for the discussion of plans, for the control of the plan, for the establishment of new technical and organisational norms of all types, for every kind of collective discussion of the all the nucleus of the factory, or all the workers of the factory, or all the workers of a department, according to the importance of each unit of production.'*⁵⁴

According to Borrego, Production Assemblies were a mechanism devised by Guevara and the Minister of Labour (MINTRAB), Augusto Martínez Sánchez, as a vehicle for communication between the administration and the mass of workers.⁵⁵ In January 1962, MINTRAB's Resolution 105 made Assemblies compulsory in all nationalised or joint-owned production units in the country. However, as with many innovative apparatus adopted at a national level, the Assemblies had been functional before that in MININD. In July 1961 Guevara had described them as a vital expression of the aspirations and opinions of the working class: a kind of legislative chamber that analyses its own tasks:

'This model will allow the exchange of many points of view, sometimes oppositional, that will educate the administrators in the school of critical analysis of their own tasks before a plenary of the mass of workers for the effective control of the task of administration. Criticism and self-criticism will be fundamental to daily work, and exemplified in the Production Assembly, where all the problems related to industry are

⁵⁴ Guevara, cited by Borrego, *Camino*, 196-7.

⁵⁵ Borrego, *Camino*, 196.

aired, and where the work of the administrator will be subject to questioning and criticism by the workers that he leads.'⁵⁶

Political organisations, trade unions, enterprise directors, or factory and workshop administrators could call a Production Assemblies at least once every three months and if possible once a month. Those organisations were to agree the agenda. The Assembly itself would choose someone from among them to chair and a secretary to record the acts and certify agreements and resolutions. All workers, employees, technicians, engineers and whoever lent services to a unit of production should participate in the production assembly.⁵⁷

The MININD *Manual* described the Assembly objectives as: motivating the workers to participate in the management of production and to contribute to benefiting the collective; applying the principle of democratic centralism; facilitating the workers in expressing doubts, and ideas, so administrators can discuss these and proffer official clarifications; creating a spirit of collective interest in the development of the factory; inspiring interest in individual and collective emulation.⁵⁸ Assemblies had to be well organised with advance notice given to workers outlining the agenda, comfortable seating and amplification prepared. The guidance went as far as suggesting that administrators announce the end time of the meeting, limit the speakers' interventions to ensure there was time to cover the agenda, avoid digressions and insist on concrete treatment of the themes, not vague generalities. A minimum of 70% of the workers must participate or Assemblies had to be cancelled. The trade union, party and other mass organisations should help ensure participation and minutes should be circulated after the Assembly to keep workers informed and encourage further analysis. The administrator was expected to respond to workers' points: 'and in this way to try to constantly improve any deficiencies of organisation; lack of interest, lack of collective participation, etc, in order to obtain the maximum benefit that a good assembly should and can yield.'⁵⁹

⁵⁶ Guevara, *Discusión*, 131.

⁵⁷ *Manual*, sección 2, asunto 4, pagina 1-2.

⁵⁸ *Manual*, sección 2, asunto 4, pagina 1.

⁵⁹ *Manual*, sección 2, asunto 4, pagina 2.

The Assemblies had to achieve a delicate balance between being authentic and gritty, tackling deficiencies in production or work conditions without becoming a forum which generated antagonism between manual and administrative workers. Guevara insisted that they do not become bureaucratic, he challenged MININD directors: 'The production assemblies have to be lively. It is your responsibility to make them lively.'⁶⁰ However, Borrego said Guevara warned that they could not become agitational meetings. They had to bear in mind the national interests and not be distracted by 'economistic' demands from workers.⁶¹ By February 1964, the deficiencies of the early Production Assemblies had become clear. Guevara told directors:

'I remember once we did an assembly of criticism and self-criticism, at the end of '61, and I believe it took a year and a half to compile the conclusions of that assembly and they were never analysed. In reality that was a bureaucratic failure, fulfilled everywhere, everyone did assemblies of criticism and self-criticism. Also there was a lot of venting and insults, the result of a lack of consciousness, the product of comrades from the mass of workers who did not understand the fundamental problems of management. But within all of that there was a set of problems that were indicators of the malaise that existed, of the deficiencies, and none of this was put to use.'⁶²

Guevara complained that a survey had shown that hardly any of the MININD directors analysed the results of the Production Assemblies. He tested them directly:

'Raise your hand all the enterprise directors who do not analyse the opinions of the Production Assemblies in your factories! Seven, no more? Now, those that analyse them! There are many. Now... who has

⁶⁰ Guevara, *Bimestrales*, 9 March 1963, 351.

⁶¹ Borrego, *Camino*, 187.

⁶² Guevara, *Bimestrales*, February 1964, 442.

noted the phenomenon that participation decreases? What enterprise had participation greater than 70% in the latest assemblies?'⁶³

On factory visits, Guevara stated, he hears numerous criticisms, some which reveal the need to improve the existing apparatus. The Assemblies must be suspended until enough workers will attend, he said. To encourage participation, the workers must be informed of the results of all their proposals, at which organisational level they were dealt with, and which have not yet been resolved, so that 'the workers start to feel they are participating in the administration'.⁶⁴ Despite Guevara's frustration with the deficiencies of the Assemblies to function as intended, he clearly believed that the institutional structure was adequate and appropriate. The deficiencies were due to administrators and directors failures to turn the assemblies into dynamic and effective forums for workers' participation in management and production, as opposed to merely a talking shop. Production Assemblies remain an integral aspect of working life in all sectors in Cuba today.

1962 CONSTRUCT YOUR OWN MACHINE

The campaign to construct your own machine has been immortalised by the Tomás Gutiérrez Alea's film *Death of a Bureaucrat* in which a vanguard worker who invented a machine to mass produce José Martí busts is buried with his worker's card, leading to a nightmarish struggle against bureaucracy to retrieve it for his widow's pension.⁶⁵ Developing out of the success of the Committees for Spare Parts, the campaign took the technical challenge to a higher level, as Sáenz said: 'to contribute to breaking, with our own solutions, the imperialist blockade imposed on our country.'⁶⁶ Borrego explained how this was organised:

⁶³ Guevara, *Bimestrales*, February 1964, 442-3.

⁶⁴ Guevara, *Bimestrales*, February 1964, 444.

⁶⁵ Alea Gutiérrez, Tomás (dir.) *La Muerte de Un Burócrata*. La Habana: ICAIC, 1966.

⁶⁶ Sáenz, *Aniversario*, 78.

'The workers and technicians with the most revolutionary drive and highest qualifications created multidisciplinary groups to copy the most important machines in the country. Later they would try to reproduce them on the scale necessary and with the largest possible proportion of national resources in order to achieve the independence required in certain technologies that traditionally had been totally imported from capitalist countries.'⁶⁷

Guevara told workers in November 1961: 'a machine is nothing more than a unit of parts. We should learn to love it and learn the mechanical sense of this machine...'⁶⁸ He told MININD directors to encourage everyone to investigate a one step further, to foster restlessness and curiosity: 'All the workers who make machines, all the workers who invent formulas, all the workers who are concerned for the rationalisation of work, which is even harder than finding a machine, all these people must be given the opportunity to be a director.'⁶⁹ Again, this demonstrates that Guevara did not distinguish between technical and political tasks.

By March 1962 Guevara had already complained that the campaign was 'another demonstration of how things have already taken a bureaucratic form.'⁷⁰ However, it appears that the campaign was revitalised. In 1963 almost every issue of *Nuestra Industria* featured workers with their inventions in a section on the campaign to construct your own machine. In a television appearance in February 1964 Guevara declared that: 'The future of industry, and the future of humanity, is not with the people who fill in papers, it is with the people that construct machines... It is with the people who study the great technological problems, resolve them... discover new things and learn to take out new things from nature.'⁷¹ It is clear that a significant quantity of machines were built and applied in industrial production.⁷²

⁶⁷ Borrego, *El Camino*, 164.

⁶⁸ Guevara, 'Discurso en el XI Congreso Nacional Obrero', 20 November 1961 in *Ciencia*, 212.

⁶⁹ Guevara, *Bimestrales*, 20 January 1962, 152.

⁷⁰ Guevara, *Bimestrales*, March 1962, 250.

⁷¹ Guevara, 'Camparecencia televisada en el programa "Información Pública"' 25 February 1964 in *Ciencia*, 180.

⁷² Details of machinery development for the sugar harvest in chapter 9.

1962/3 COMMITTEES FOR LOCAL INDUSTRY

*'Between the socialist enterprises there can be no transfer of commodities because there is no change in property: so the use of those utensils or means of production in other more rational ways by another enterprise, without a real transfer of property, of legal contract, the goods simply go from one place to another... That could be desk, machines, a vehicle that is not being used, that everyone is reluctant to hand over... we get together, discuss and resolve this.'*⁷³

The Committees for Local Industry (CILO) were created to forge the unity of production and management at the micro level which the BFS institutionalised on a national level. Previous chapters have detailed the centralisation of funds and their allocation according to political priorities under the BFS and Guevara's criticisms of commodity exchange between enterprises under the Auto-Financing System (AFS). The CILOs should be understood as an extension of those ideas.

The CILOs were first operational in 1962. Administrators from each entity within a local area would meet fortnightly to discuss their situation in terms of resources, to see whether any of them had materials which could be lent to those in need. The function of the CILOs expanded to include education and training for administrators. Organised at a local level as part of early ministry efforts to decentralise, there were some problems, such as CILO policies which clashed with ministry directives.⁷⁴ In July 1962 Guevara said:

'...the CILOs have an enormous importance as a means for decentralising and they are not being understood properly. The CILO is an idea for preparing the conditions for...the construction of socialism, and from socialism to communism....self-management is a measure to prepare the conditions for raising the consciousness, to create the base of

⁷³ Guevara, *Bimestrales*, July 1962, 301.

⁷⁴ Guevara, *Bimestrales*, March 1962, 251.

communism: work as a social necessity; not work as an obligation, as a precondition for eating... The CILO should be resolving the local problems'.⁷⁵

Guevara emphasised the importance of promoting this level of cooperation. He complained that when the administrator of a petrol unit gave two surplus desks to another administrator from the shoe enterprise who was writing on his knees, he was told off by his own EC for not seeking prior permission. He revealed that some sugar mill administrators had not been attending CILOs, but the Ministry's Provincial Delegations should oblige them to attend. He concluded: 'What is fundamental? That the CILO condenses the opinion of every body and that it is understood that it is another apparatus at the base of the Ministry.'⁷⁶

To overcome some of these failures the CILOs management was centralised in 1963. However, to avoid the bureaucracy which plagued other initiatives, Guevara nominated a single individual responsible for CILOs at the ministry level. That was Eugenio Busott, Director of General Services in MININD. Each area covering 15 to 20 MININD factories was organised with a CILO which met fortnightly. Havana alone had 20 CILOs. Each CILO selected a president from among them to represent it on the Board of Local Coordination, Execution and Inspection (JUCEI-local) – a nationwide apparatus responsible for rubbish collection and other services. This responsibility was rotated to give all the administrators the experience. CILOs meetings should not take place where the head of the CILO worked, but in different locations so they would become familiar with other work centres. The CILOs reported on their meetings and agreements made. They received ministry instructions via the Provincial Delegates, except the CILOs in Havana that were directly subordinate to Borrego as First Vice Minister. The agreements reached in the CILOs could not contradict the directives received from the MININD ECs. The administrators' participation in the CILOs was obligatory as was their fulfilment of agreements reached by the CILOs. Busott travelled around visiting CILOs

⁷⁵ Guevara, *Bimestrales*, July 1962, 300.

⁷⁶ Guevara, *Bimestrales*, July 1962, 303.

throughout the country. He recalled the types of obstacles faced:

‘There was an old bakery where the oven was insulated with special brick, refractory brick. The oven collapsed and they needed a special mason because of the oven’s shape. Nearby was a sugar mill with a mason, but the administrator there didn’t want to cooperate. He thought he was too powerful to be part of the CILO. Che told him “Ok, from tomorrow the workers at the sugar mill will not receive bread from the bakery”, to demonstrate how every one was linked. That convinced the sugar mill administrator not to think he was self-sufficient... Most important about the CILOS was the sense of belonging, that each unit was part of that big Cuban factory.’⁷⁷

Arcos was head of the light mechanics branch. He explained the CILOS potential to resolve concrete problems: ‘I had a factory that wasn’t working through lack of electricity. There were five electricians who were being paid without working. In front there was a hairdresser which five broken hair dryers. The solution was obvious, but in this case it didn’t work because the hair dressers belonged to the Ministry of Internal Trade. But that is how Che wanted it to work.’⁷⁸ Arcos explained that the goods exchanged between entities did not take the form of a gift. They handed over official papers and accounting and inventory adjustments had to be made.

In 1964 CILOs’ aims and functions were outlined in the *Manual* which stated that: ‘the growing complexity of industrial development, such as the need to use our resources more rationally, makes necessary the coordination among territorial bases of the industries administered by the Ministry of Industries.’⁷⁹ The CILOs’ functions are: to serve as a vehicle for the mutual lending of technical and material assistance between the industries in the same locality or region; to coordinate the activities of its participants; to facilitate the exchange of experiences; to coordinate industrial

⁷⁷ Eugenio Busott, interview, 9 December 2004.

⁷⁸ Arcos, interview, 30th March 2006.

⁷⁹ *Manual*, sección 16, asunto 1, página 1.

plans with local interests and through JUCEI local, to suggest new local investments.⁸⁰ CILOs also discussed new laws, directives and norms emerging nationally and from MININD.⁸¹ Their functions expanded to organise training for administrators. In August 1963 Guevara cited that 986 administrators had taken a course with CILOs.⁸² In September 1964 Guevara reaffirmed: 'The CILOs have been an attempt, successful enough we believe, to create the consciousness of one factory.'⁸³ Borrego pointed out that:

'The ideas about industrial cooperation did not come from intuition; they were the result of his studies of the experiences of other countries, including capitalist countries such as Japan which had demonstrated the utility of intensive cooperation. If such cooperation was effective in the functioning of capitalist interests, it would prove much more necessary and important to develop this experience in socialist conditions where social interests prevailed over any private or enterprise interests.'⁸⁴

This supports Guevara's claim that the existence of monopoly capitalism in Cuba created conditions more conducive to the transition to socialism, than those prevailing in 1920s Soviet Union, out of which the AFS, had emerged. Arcos even claims that the CILOs held the genesis of the system of People's Power institution in Cuba today.⁸⁵

⁸⁰ *Manual*, sección 16, asunto 1, página 1.

⁸¹ Arcos, *Aniversario*, 25.

⁸² Guevara, *Bimestrales*, 10 August 1963, 362. See chapter 6.

⁸³ Guevara, *Bimestrales*, 12 September 1964, 514-5.

⁸⁴ Borrego, *Camino*, 287.

⁸⁵ Arcos, interview, 2004.

1964 PLAN OF INTEGRATION

*'For a long time we have proposed the necessity of a real integration between productive and intellectual work, something that has been realised through voluntary labour of a productive character, that now has been presented in a plan at the national level.'*⁸⁶

The Special Plan of Integration was presented to MININD directors in September 1964 as a set of ideas to deal with weaknesses in the political work of the ministry: the tendency to bureaucracy, and the separation between manual and administrative work that, Guevara said, were problems that had appeared to be endemic in existing socialism. It was a measure: 'to renovate the attitude of functionaries in the face of their work.'⁸⁷ An outline of the proposals was distributed to directors who were given 15 days to comment and make amendments. Even the title, Guevara said, could be changed. Some measures were voluntary, others obligatory. This was to be piloted from 1 November 1964 and applied throughout MININD from 1 January 1965.

The Plan of Demotion was the principal and obligatory measure whereby directors had to spend one month a year working in a position that was at least one level, and preferably two, subordinate to their own. The plan applied to the minister (Guevara), six vice ministers (first vice-minister, basic industry, light industry, economy, industrial construction and technical development), 90 branch, office, and institution directors. In exceptional cases it could also include administrators or technicians in large factories. Within a one month period not more than 25% of a given hierarchy could be demoted so, for example, only one vice minister could be demoted at any given moment.⁸⁸ Their own work would be covered by a colleague, while they worked alongside their subordinate, creating a system of work substitutes which remains in Cuba today.

⁸⁶ Plan of Integration; read by Guevara, *Bimestrales*, September 1964, 514.

⁸⁷ Guevara, *Bimestrales*, September 1964, 514.

⁸⁸ Guevara, *Bimestrales*, September 1964, 515.

Other measures of the Plan of Integration were the establishment of specialist work brigades formed from outstanding workers to assist throughout the ministry. Arcos explained: 'This plan also included a plan of mutual assistance between offices of enterprises or between administrators of factories, a plan of specialised work brigades, and a plan of brigades for work methods.'⁸⁹ This was a case of horizontal integration; managers from stronger ECs be that of the director, heads of production or economics heads would assist weaker ECs, and administrators would do likewise.

Announcing the formation of the specialist work brigades Guevara said they would be organised around eight fundamental tasks of MININD, with workers outstanding in these areas. He gave the examples of work security, organisation of transport, mechanisation of accounting, and so on. These brigades would be auxiliary for ministry personnel of the same specialisation.⁹⁰ The specialist brigades were to be set up by the ECs themselves, which would start by listing a speciality in which they are strongest and organise groups around this. The brigades would operate in the enterprises weak in that area for a specified period, consolidating their work. Workers should be considered for the brigades if they have easily fulfilled the goals in their own employment, but participation was voluntary. A special salary system would be established, which would be transferred with them as they travelled through the provinces visiting MININD entities and teaching others their methods. Technical teams for maintenance or electrical engineering were also planned.⁹¹ As an example, Guevara said the EC of Soaps and Perfumes, directed by Miguel Domínguez, would organise a specialist brigade to assist other enterprises with their inventories. The aspiration was for specialists in many fields, he said, who would give guidance to the weakest enterprises.⁹² The fact that such specialist brigades were being proposed testifies to the success in raising skills levels of MININD workers as part of a national educational drive five years after the massive deskilling of the Cuban labour force resulting from the exodus of managers and technicians. Guevara emphasised the cooperative spirit of these exchanges:

⁸⁹ Arcos, *Aniversario*, 28.

⁹⁰ Guevara, *Bimestrales*, September 1964, 515-6.

⁹¹ Guevara, *Bimestrales*, September 1964, 516-8.

⁹² Guevara, *Bimestrales*, September 1964, 535 & 542. See chapter 7.

'The comrades who carry out any of these advisory tasks should not present any reports, this is to ensure and conserve the spirit of affectionate and disinterested help between people, so that weaknesses are analysed only with the objective of improving them and not to serve as an antecedent for taking future action, except if they have detected abnormalities that constitute crimes against the Revolution or against the State. That is to say that there is no kind of "squealing" lets say, so that straight away the weak people are going to think of the *compañeros* as hungry lions. It is better if this task is carried out as a completely extra-ministerial form of assistance for the purpose of information, except, naturally, if there are serious things detected of a non-administrative nature.'⁹³

Another voluntary measure of the Plan of Integration was the promotion of managers carrying out voluntary labour in factories during vacations. Guevara explained the motive: 'it is essential that directors, administrators and other leaders participate directly in manual tasks. However, this will be voluntary and separate from the earlier point about obligatory demotion.'⁹⁴ Juan Borroto, Director of Supervision recalled that after spending one week on his honeymoon, he went to work in a glass factory for three weeks. 'I worked on a line where the bottles come out. If you don't catch the bottles they fall on the floor and break. When you leave the factory you continue the same movements as in the factory!'⁹⁵ This was an important lesson for Borroto about factory work, which stayed with him for life.

Guevara revealed that not everyone agreed with the Plan, including members of government, at which level it had not been approved. This is evidence of the institutional independence of MININD, which permitted Guevara to experiment with the development and application of the BFS. His approach was to apply new measures to test their feasibility, which would give concrete results serving as an argument either for or against them. This was the process of learning by doing,

⁹³ Guevara, *Bimestrales*, September 1964, 517.

⁹⁴ Guevara, *Bimestrales*, September 1964, 515.

⁹⁵ Juan Borroto, interview, 26 January 2006.

through which many of the projects developed in MININD were consequently adapted in other institutions. In relation to the Plan of Integration he said:

'To avoid scrapes and susceptibilities, it is preferable to use it, refine it, analyse the results and after to demonstrate it as the fruit of a complete experience to be considered for use, changed partially or totally, or scrap the system. We have a set of ideas; some expressed by comrades here, others used totally or partially in other socialist countries that in their entirety constitute new experiences in this country. We will give a period of 15 days for every director to analyse the scheme of guidelines and make the suggestions they consider necessary.'⁹⁶

A commission should be established, he said, to compile the suggestions and opinions of the directors concerning the proposals.

When implemented the Plan of Demotion stipulated that during temporary occupation directors should: not search for mistakes, but learn and teach; not change work methods, established systems, without profound analysis and collective discussion in the factory; assume full responsibility for that role, without leaving tasks incomplete; complete all the obligations of the new role without using the hierarchy of their real role.⁹⁷ In addition to strengthening the administrative and leadership work of their subordinates, Arcos pointed out that the Plan also meant that those demoted could observe whether it was possible to apply the regulations directed from superior levels: to experience the social-labour conditions of the factory, workers' refectory and food, sanitary installations, equipment for physical protection, and so on; to connect to the mass of workers and understand their problems; to learn about the operative and technological problems at the entity and the technology of the production process, which would prove useful when they returned to their official role. In addition, it served to remind them that their management roles were not fixed for life and that directors could return to the

⁹⁶ Guevara, *Bimestrales*, September 1964, 518.

⁹⁷ Arcos, *Aniversario*, 27-8.

production base.⁹⁸ Directors who had been in their current position for less than six months did not qualify to participate. Guevara stated: 'The ministry is one administrative and technological entity. It is subject to a methodology which is distinct when observed from different levels... You can observe where there are mistakes of methodology, failings in the methods of work and even personal weaknesses also.'⁹⁹

When Guevara left Cuba for the Congo in April 1965, many of his projects were frozen and then abolished in October 1965 by Joel Domenech who took over from Guevara's stand-in Arturo Guzmán Pascual. Consequently, the Plan of Integration was barely institutionalised within MININD, although some vice ministers and directors had taken part. Arcos pointed out certain aspects of the spirit of the Plan were generalised throughout Cuban institutions: the paring of workers so that every one has an institutional substitute, the emphasis on intellectual and administrative workers doing voluntary manual labour, especially students and cadre of political organisations.¹⁰⁰ The latter policy was already generalised practice since the beginning of the Revolution, but Guevara's Plan of Demotion had aimed to further systemise the practice, instead of relying on periodic emulations or national mobilisations in periods of crisis.

HYGIENE AND SAFETY

*'We have taken factories of the capitalist system where the most important point was to produce... and in Cuba the conditions were very bad, very unhealthy. We have dedicated our efforts to improving life, the time that workers spend in the industrial plant. This will be one of our main efforts throughout the coming year.'*¹⁰¹

⁹⁸ Arcos, *Aniversario*, 27-8.

⁹⁹ Guevara, *Bimestrales*, September 1964, 519.

¹⁰⁰ Arcos, interview, 2004.

¹⁰¹ Guevara, cited by Borrego, *Camino*, 361.

For Guevara, human beings were both the means and the ends of socialism and communism. Production had to serve humans, not enslave or oppress them. This was reflected in the prominence *Nuestra Industria* gave to issues of hygiene and safety at work. Each issue carried a drawing of a chaotic work centre with innumerable disasters waiting to happen with the prize of revolutionary books offered for the reader who could cite the most errors.¹⁰² Guevara even raised the issue with directors in the bimonthly meetings. In February 1964 he complained about a lack of consideration from some administrators for the welfare and conditions of the workers. As an example he recalled his visit to shoe factory during which a worker complained about the dust where he worked, saying that he had requested a ventilator or to change positions because his asthma was irritated. When Guevara communicated the complaint to the administrator saying it was brutal to leave a man with asthma working in the dust, the administrator replied that actually the man had tuberculosis, not asthma. Guevara was disgusted by the lack of sensitivity.¹⁰³ On visits in the provinces he had been dismayed by the lack of small investments to provide the workers with even a sit-down toilet: 'There is nothing to impede this; on the contrary, this is neglect and not knowing how to mobilise the people to resolve this type of problem.'¹⁰⁴

In his last bimonthly meeting Guevara reminded directors that man was the great protagonist of evolution and warned: 'we do not just dedicate ourselves to be producers, but we must consider the productive substance of work, which is man... we must sacrifice what there is to sacrifice to carry out investments that assure hygiene and safety at work'.¹⁰⁵ He insisted that the two fundamental pillars of the BFS were centralised, administrative control and the emphasis on man: 'the individual as the protagonist of the Revolution'.¹⁰⁶

The *Manual* dedicated a section to hygiene and safety at work. It stated:

¹⁰² *Industria*, enero 1963, 46.

¹⁰³ Guevara, *Bimestrales*, February 1964, 443.

¹⁰⁴ Guevara, *Bimestrales*, February 1964, 445.

¹⁰⁵ Guevara, *Bimestrales*, February 1964, 551.

¹⁰⁶ Guevara, *Bimestrales*, 5 December 1964, 551

'The administrators of factories are just not technical leaders of productive installations, but first of all they are leaders of collectives of workers, for whose health and safety they assume responsibility during their stay at the work centre, which in turn contributes to the peace and happiness in the workers' homes, sparing their families from the sorrow and worry that work accidents always cause... The most important factor of the productive forces is man, who makes the machines, tools, equipment and factories... To obtain the results with the maximum productivity it is vital that the work conditions and the workers themselves are in the best conditions to produce according to the needs of society.'¹⁰⁷

On the path to socialist construction, stated the *Manual*, there will be a rapid development of the productive forces. The administrator must oversee an increase in production and productivity in line with the needs of the working class. The general tasks for Hygiene and Safety were: to protect the worker from the dangers of harmful machines, environmental risks and the danger of their own mistakes; to protect production, avoiding accidents which paralyse or affect it; to protect the economy from unnecessary costs and waste caused by accidents, such as unemployment compensation, broken parts, medical costs and reparations.¹⁰⁸ The *Manual* detailed the Ministry resolution on medical provision for workers and the coding system for products and work areas according to their characteristics, warnings about danger levels and the location of safety equipment.¹⁰⁹

Regular health and safety inspections were integrated into administrative work: 'Inspection is the principal means to discover and improve defective conditions, risks, unsafe actions, etc.'¹¹⁰ Each EC had a person responsible for hygiene and safety to inspect every work centre. However, each work centre also had a person responsible for regular inspections. These inspectors should examine and make

¹⁰⁷ *Manual*, sección 18, asunto 1, página 1.

¹⁰⁸ *Manual*, sección 18, asunto 1, página 1.

¹⁰⁹ *Manual*, sección 18, asunto 3, página 1.

¹¹⁰ *Manual*, sección 18, asunto 4, página 1.

recommendations on: accident reports; order of operations; maintenance of machines, equipment and tools; protection of machines; conditions of floors, stairs and passageways; access to all places where personnel go; light, heat and ventilation; equipment to protect personnel; conveniences; reparation and conservation of the plant; and the possibilities of catastrophe, such as boiler, gas or vapour explosions, work in tanks or metal basins, storage of inflammables, and explosives.¹¹¹ Those responsible for inspections must not take a superior attitude and should:

‘...finish the inspection visit with a chat with personnel where they are informed of the general conditions in the plant and the collaboration necessary to improve them... The person responsible for Hygiene and Safety should take advise in everything possible from the workers, technicians, department heads, etc. those who through their experience can contribute opinions that should analysed, with the aim of making the most logical recommendation with the view to reaching a final solution.’¹¹²

In addition to commenting on problems in hygiene and safety, the inspector should suggest concrete solutions and give a determined time period for their completion, which would be followed up to ensure that the measures had been taken as agreed. Three inspection forms were included in the *Manual* with details about how to fill them in.¹¹³ The concern for work conditions; both of the worker and equipment were not just conceptually important, but the apparatus was institutionalised in order to monitor, assess and improve them.

¹¹¹ *Manual*, sección 18, asunto 4, pagina 1.

¹¹² *Manual*, sección 18, asunto 4, pagina 3-4.

¹¹³ *Manual*, sección 18, asunto 4, pagina 5-12.

ABSENTEEISM

*'Is it the case, gentlemen, that the working masses in a North American factory have affection for the owner? Absolutely no affection, and is there political vigilance in watching over production? No there is not, because there is a set of administrative mechanisms that when production fails allow administrative measures to be taken which mean that a mister workman who is careless earns less, his own person receives the measure of his mistake, in a peaceful way...'*¹¹⁴

Essentially capitalism uses the fear of unemployment as an apparatus of social control and to induce productivity by competition between labourers. In early 1960s Cuban workers who had toiled under capitalism suddenly found they had employment guaranteed, albeit in agriculture, free education and numerous training courses, health care provision for themselves and their families, a food ration and prices frozen. At the same time their consciousness and values had been moulded by capitalist social relations. New attitudes and cultures are not created overnight. Inevitably, absenteeism was a serious a problem, the epitome of the problem of inertia and low productivity. The challenge of reducing absenteeism was confronted in every measure, every apparatus which attempted to engage the labour force, which aimed to collectivise production and workers participation. However, some directors began to formulate specific polices to reduce absenteeism directly.

In October 1961, speaking to all MININD workers, Guevara recounted his recent experience of touring the offices in the ministry building:

'..there were many people missing, its true that the eighth floor is planning, and people had to go to specific places, but there were other people who listened to the radio, there were others who were chatting and what is more when I started to go round one by one, immediately the

¹¹⁴ Guevara, *Bimestrales*, March 1962, 180-181.

people who had been missing started to return and get on with their work, or if not everyone was in a meeting with the comrade Lavarne. It seems that the comrade Lavarne was suffocating with all the employees of that floor who he was meeting with, everyone that was missing was said to be in that meeting.’¹¹⁵

Despite the national campaigns against absenteeism, complained Guevara, it even existed in the ministry building: direct absenteeism, people who just did not turn up to work: and indirect absenteeism, arriving late, leaving on time and not completing the work properly. Time lost was part of the indirect costs of production, he said, adding that it was a significant sum.

In the spirit of self-criticism which characterised that speech, Guevara took the blame, as minister, for not having a methodology in place to know the reality. For Guevara the question of absenteeism was not just about production costs, it was an ethical one as well. Attempting to demonstrate how these apparently individual choices and patterns of behaviour affect relations at a much broader level, Guevara reminded ministry workers about the sacrifice made by the Chinese people in order to show internationalist solidarity with the Cuban Revolution. Despite China's relative backwardness the Chinese people work industriously, donating massively in aid and trade to secure the Cuban Revolution. He asserted:

‘We have to complete our share, we do not have the right to listen to the radio in work hours, we do not have the right to squander a moment of production when there are 650 million people, each one of them who gives a bit of their share of fabric, or a grain of their rice, things they need to satisfy the main needs in life, they give away so the Cuban people have non-essential goods... without rice we could live perfectly well and here in Cuba our level of consumption of non-durable goods is

¹¹⁵ Guevara, *Charla*, 294-5.

infinitely superior per capita to most socialist countries: in shoes, hides, soap...automobiles, petrol.'¹¹⁶

In March the director of the EC of Cement, Ramírez, told other directors about two non-financial approaches developed in his enterprise to tackle absenteeism. Firstly, a commission for illness; factory workers selected by the trade union who visited those off sick. Presumably, if there was no real ailment, the homebound worker would be embarrassed into returning to work. Secondly, the factory bulletin had a section on 'absentee of the month', which provided the personal information on who this was, minus the name. Readers were invited to guess the identity of the offender, to be revealed in the next month's bulletin. Ramírez explained that: 'This provokes tremendous discussions about who it will be... we are seeing a real reduction in absenteeism in the factory; it has been taken up positively, the workers are no longer being absent for the sake of it.'¹¹⁷ Doubtlessly, in the process of these discussions workers would openly articulate the problem of absenteeism and evaluate colleagues for their attendance, thus raising consciousness of the severity and consequence of the problem, as a precondition for tackling it. Absenteeism would decrease as workers avoided the shame of being named in the bulletin.

Borrego claimed that in general absenteeism was a phenomenon among the higher income level workers, those who had worked within US corporations, which had served to divide workers through differential pay awards, reducing the trade union movement to a permanent 'economistic' struggle for salary increases.¹¹⁸ With salaries frozen, these workers had benefited least from the upheavals caused by the Revolution. They pursued their individual self-interest, lacking identification with the production needs and goals of the Revolution. Success in tackling absenteeism depended on an apparatus of administrative compulsion, in addition to general success in fostering a collective consciousness towards production. Both direct and indirect absenteeism remain serious problems in Cuba, indicating that the puzzle of

¹¹⁶ Guevara, *Charla*, 297.

¹¹⁷ Guevara, *Bimestrales*, March 1962, 249.

¹¹⁸ Borrego, *Camino*, 169-170. This is validated by several testimonies including that of EC director Alberto who affirmed that most problems of discipline came from technical personnel. *Bimestrales*, 5 December 1964, 559.

motivating production without dependence on capitalist levers whilst maintaining universal social welfare provision has still not been solved under socialism. Guevara and his MININD colleagues had initiated the search for a solution.

PERSONAL RECORDS

From February 1964 a new universal system of workers' personal records was implemented nationwide in Cuba. Records mainly held administrative details, health problems, medical certificates and other official notes. However, in May 1964, Suárez Gayol, director of the Cuban Institute of Mineral Resources, described how his institute were expanding the function of the records to induce commitment to production. Positive reports about the workers efforts were added to the record, as were reports of any indiscipline, with a copy sent to them also:

‘We have some practical examples of how positive this experience has been. We have taken this issue to workers in Production Assemblies. The importance of their record and making workers consciousness of the need to care for their record, their labour history, will definitely serve them and serve the enterprise in deciding on any claims and selections for more qualified posts... this has captured the spirit in workers, in caring for their personal record, taking care of their labour history in the work centre.’¹¹⁹

Guevara solicited the opinion of other directors about the system Gayol had proposed. One director compared it to before the Revolution when the capitalist owners of US enterprises had threatened the workers with adding things to their record. Guevara added caustically: ‘We will have to send people to the United States to learn how to treat the workers.’¹²⁰ Gayol denied his system was comparable to that under capitalism. It was not to be imposed as a threat, but discussed with the

¹¹⁹ Suárez Gayol, *Bimestrales*, 9 May 1964, 476.

¹²⁰ Guevara, *Bimestrales*, May 1964, 477.

workers, it should be explained that their record was how they would be judged on their worth to society. People had shown such concern to for their personal record that they had preferred an administrative or economic sanction, even to be sent to Guanahacabibes labour camp, rather than have something noted on their personal record.¹²¹ In addition, Gayol pointed out that when it came to the selection of vanguard workers this record would help them judge who fitted the criteria, based on written documents not just verbal recommendations. Guevara concluded that no administrative decision could be reached on this proposal, because it would inevitably be bureaucratic. The decision of whether or not to adopt this line towards personal records would be taken collectively with the masses. He urged those directors interested in utilising this method to discuss it in their Production Assemblies with the mass of workers, and in six months time they could explain the workers' reaction and/or experiences in applying this method.¹²²

In December 1964 Guevara asked directors for their experiences with the personal records. Two directors responded. The first had tentatively applied the policy in some recent cases of indiscipline, but admitted to failing to apply it in a positive way, with commendations about workers performance. The second had met with the EC's administrators and heads of personnel before introducing the personal records for technicians and management staff. The director said:

'We have given this the most emphasis with the technical personnel because this is where we have the most problems. It is producing a very good effect in that we are improving our work a lot. The technicians know that they are evaluated, we discuss with them, and we have applied a system in the units of production so every three months they discuss their work with us. We also do this with the administrators and in this way we are fomenting it among the leadership personnel in order to later apply it to other levels.'¹²³

¹²¹ Chapter 10 for details about Guanahacabibes.

¹²² Guevara, *Bimestrales*, 19 May 64, 478-9.

¹²³ Alberto, *Bimestrales*, December 1964, 559-560.

Other mechanisms were in place to punish 'indiscipline' by management personnel in MININD, however, the mass of workers were exempt from these policies. The use of personal records was an attempt to foster the same accountability among the masses. What stands out is the experimental atmosphere within MININD, in searching for new apparatus to strengthen the key tenets of the BFS: administrative control, consciousness and technological progress.

CONCLUSION

*'...we are attempting to develop to the maximum the consciousness of workers at all levels of production to think of work as the highest expression of being human, searching for integration in this way in work that is freed from the fetters of the need of workers to earn their bread... so workers at all levels in our Ministry work because it is their social duty.'*¹²⁴

The policies detailed above: Factory visits, Committees for Spare Parts, the Movement of Inventors and Innovators, Advisory Technical Committees, Production Assemblies, the campaign to Construct Your Own Machine, Committees for Local Industry, the Plan of Integration, Hygiene and Safety procedures, policies to tackle absenteeism and the Personal Records, aimed to integrate workers into the management of production, to harness their experience and creativity to resolve problems and rationalise production, and to induce them to identify with the means of production as their own. For Guevara they were mechanisms to equip the working class for increasingly decentralised and direct control over production. This was vital for the transition to communism as well as to overcome the practical problems of the production process. The policies complemented the educational and technical training apparatus and financial and accounting aspects of the BFS serving to undermine the operation of the law of value and emphasise the role of consciousness and human beings at the centre of production. It meant production would be

¹²⁴ *Memoria Anual 1964*, Ministerio de Industrias, Republica de Cuba, 1965, 107.

determined according to social and political rationale, rather than just the economic rationale characteristic of capitalism.

Guevara's emphasis on integrating workers into the technical and managerial aspects of the economy did contribute towards a conceptualisation of how socialist society is to be built: promoting the self-management of the Cuban masses. It must be recognised, meanwhile, that the persistently punitive US blockade and terrorist attacks against Cuba have limited the feasibility of decentralising control to the Cuban masses. It has been necessary, therefore, to integrate the mass of workers into the central apparatus of government. The decentralisation to which Guevara aspired has not yet been achieved.

CHAPTER 9

Science and technology

*'We cannot follow the development process of the countries which initiated capitalist development, 100 or 150 years ago – to begin the slow process of developing a very powerful mechanical industry, before passing on to other superior forms, metallurgy, now chemicals and automation after that. We have to jump stages. And conscious of our backwardness, conscious of our economic weaknesses and of our technical weaknesses, try always to make use of the best world technology; without fear of having the best world technology here, and as quickly as possible develop technicians capable of operating these plants.'*¹

Capitalist competition, noted Guevara, drove the application of science and technology to industrial development, constantly revolutionising the productive forces.² Modernisation of production was also the key to economic efficiency under socialism. Given the level of underdevelopment in pre-1959 Cuba, rationalising production, equalising distribution and offering incentives to workers could result in an immediate rise in productivity. However, the precondition to sustained economic development was scientific research and technological innovations. The socialist government had to find a method for fostering an innovative approach, without relying on the law of value, competition and the profit motive. In the search for solutions to this challenge Guevara set up apparatus within the Ministry of Industries (MININD) to institutionalise the application of science and technology to industrial production. This apparatus was integral to his Budgetary Finance System (BFS) and

¹ Guevara, 'Discurso en el acto de inauguración de la industria nacional productora de utensilios domésticos INPUD, 24 July 1964, in *Ernesto Che Guevara: Ciencia, Tecnología y Sociedad 1959-1965*, La Habana: Editorial Academia, 2003, 67-68.

² See chapter 11 for details.

the concretisation of his belief that to build socialism it was necessary to develop in both consciousness and production.

This chapter begins by exploring Guevara's development paradigm; industrialisation based on endogenous resources. This ambitious development strategy aimed to maximise Cuba's self-sufficiency by using the island's natural resources to create a mechanical and manufacturing base as a preliminary step towards the introduction of automation and an advanced chemical industry. This is followed by an examination of the obstacles to that strategy: mistakes made during the early adoption of an import substitution industrialisation (ISI) strategy; the scarcity of science technicians to develop and implement the numerous ideas, which generated a reliance on foreigners; the need for a training infrastructure to prepare future specialists; the lack of financial and material resources and institutions to foster technological innovations; the general deficiency in the development vision of the government and production managers; isolation from the advanced capitalist world, imposed by the US blockade, which obstructed the flow of information and technology transfers, thus undermining Guevara's insistence on using the most advanced technology; and the relative backwardness of Soviet bloc capital goods purchased. This paradoxically hindered Cuba's ability to 'jump stages' in development whilst simultaneously buffering the Revolution from the threat of collapse because of the US blockade. The Soviet support facilitated the establishment of MININD's research and development institutes.

The aims, obstacles and achievements of these institutes are examined below. Despite the often insurmountable hurdles, there were tangible results. Many of the objectives set out for the research and development institutes in MININD were not feasible in the short term. It is not the intention of this thesis to assess the extent to which Cuba's contemporary scientific-technological developments are a direct legacy of those institutes. Nonetheless, it is clear that Guevara introduced a methodology for applying science and technology to production and an appreciation of its pivotal role in economic development which characterises Cuba today.

PROPOSED LINES OF DEVELOPMENT

Five months after the foundation of the Department of Industrialisation within the National Institute of Agrarian Reform (INRA), Guevara projected future lines of development, grounded on the specific conditions of the island and reflecting international technological progress. He told Havana University students that:

‘we have initiated a process of development that includes six very important and basic branches of production which are: heavy chemicals, organic chemicals starting with hydrocarbons from sugar cane, minerals, combustibles, metallurgy in general and the iron and steel industry in particular and the products derived from our intensive agriculture. But we have seen a sad reality that the training given in the universities in the country is neither adequate, nor sufficiently orientated, towards the new necessities of the Revolution.’³

Two years later he wrote that: ‘*Prima facie*, we orientate ourselves towards four lines of development: metallurgy, naval construction, electronics and *sucroquímica*.’⁴ Three prerequisites were essential for such developments: the rational exploitation of natural resources, creation of a mechanical base and training at all levels.

Regino Boti, a Harvard-educated Cuban economist and co-founder of the UN’s Economic Commission for Latin America (ECLA), returned to Cuba in January 1959 to be Minister of the Economy, later renamed the Council for Economic Planning (JUCEPLAN), in the Revolution’s first moderate government.⁵ Soon after, an ECLA mission arrived in Cuba. Its economists promoted an import-substitution industrialisation (ISI) strategy for economic development, an approach common in

³ Guevara, ‘Discurso en la universidad de La Habana sobre el papel de la universidad en el desarrollo económico de Cuba’, 2 March 1960, in *Ciencia*, 187-8.

⁴ Guevara, ‘Tareas industriales de la Revolución’, March 1962, in *Ernesto Che Guevara: Escritos y Discursos*, Tomo 6, La Habana: Ciencias Sociales, 1977, 105. By *sucroquímica* Guevara was referring to chemical derivatives from sugar cane, see *Ciencia*, 29.

⁵ While other ministers of that government left the Revolution, Boti remained as part of its leadership until his death in 1999.

Latin America since the late 1940s.⁶ During Guevara's trade mission to the socialist bloc in October 1960, factories were purchased according to a list of finished products needed to replace imports. Within a year and a half it was clear that this criterion had been disastrous. Guevara explained the mistake:

'We lacked due emphasis on the exploitation of our own resources; we worked with our vision fixed on substitution of imports of finished goods, without seeing clearly that those articles are made with raw materials that are necessary to have in order for them to be manufactured... We continue to be largely dependent on foreign trade to resolve our problems, but the possibilities of being supplied by foreign trade are also limited in the industrial plane, because of the enormous development of other sectors of the economy and the life of the country that demands materials from abroad.'⁷

Guevara listed factories for brushes, screws, pickaxes and shovels, electric solders, barbed wire, among others, which Cuba had purchased because the finished product was needed, but which relied on imported materials. This was a costly mistake, the US blockade was already cutting off imports from the capitalist world. Pursuing rapid industrialisation was idealist and in August 1961 the National Production Conference confirmed that the sugar industry would continue its historic role as principal export, to secure vital imports, whilst serving as the basis of accumulation for longer term investments in industry and social welfare. Guevara's industrialisation strategy was to be based on the manufacture of endogenous natural resources, including the industrial application of the sugar cane. Guevara envisaged a diversified chain of production with both horizontal and vertical integration. He told MININD directors:

'...to develop textile factories and have to buy the thread is an absurd policy. We have to develop cotton together with the textile factory; have

⁶ Under pressure from the US, the ECLA mission was withdrawn by Raul Prebisch in summer 1960.

⁷ Guevara, *Tareas*, 103.

to develop iron together with the factories that will consume iron... From sugar everything should be extracted. [There are] huge possibilities of converting sugar, as an article of consumption, into a secondary product... Just as lard is a secondary product of pork in the United States, we will be able to reach that point with sugar production so that sugar will serve as a primary material.’⁸

Theoretically, the lines of development proposed by Guevara were feasible, in that they recognised the natural resources and historical legacy of the Cuban economy. Guevara’s logic was thus: Cuba holds rich metal deposits, especially nickel, which could form the base for the mechanisation and production, first of much needed spare parts and later of capital goods. As an island, hugely reliant on overseas trade for survival, developing a merchant fleet would save Cuba millions in hard currency paid to others for transporting imports and exports. The precondition for this would be the development of the iron and steel industry. Using sugar cane as a primary material for manufactured and chemical goods would increase the value added to Cuba’s exports based on the historical mono-crop. Furthermore, Guevara argued that countries that could master electronics and automation technology would be in the vanguard of international development.

To begin to overcome the lack of adequate training and infrastructure for these tasks in the existing academic institutions Guevara set up research and development institutions within MININD, focussing on sugar cane derivatives, minerals and metals, the chemical industry and agricultural bi-products, technological innovations and automation to improve productivity. His intention was to establish an institutional framework to begin experimentation at both ends of the production chain; raw materials and manufacturing simultaneously. Not all these projects were feasible in the short term, however, more important than the productive achievements was the methodology introduced.

⁸ Guevara, ‘Reuniones Bimestrales’, 14 July 1962, *El Che en la Revolución Cubana: Ministerio de Industrias*. Tomo VI. La Habana, Ministerio de Azúcar, 1966, 286.

To implement his long term vision, Guevara worked towards strategies that transcended the annual plan. An Office of the Perspective Plan was created within MININD to prepare a development plan for 1965-1970, projecting statistics forward and determining the priority lines of production. A young Cuban economist, Miguel Figueras became director of the Perspective Plan from 1963, taking over from Ciro Oyarzún, a Chilean communist who went on to become Director of Investments. The team consisted of less than 20 experts and administrators. Figueras recalled among them Dr Mario Fleitas, an electrical engineer and university professor who had trained in England, and another who was a chemical engineer with an economics masters from the US; professionals trained in the most advanced capitalist countries. They studied industrial development and the role of new technologies. The Cuban state had just two computers, one of them being a greyhound betting machine imported privately in 1950s and used by Guevara in MININD and the other was an Elliot 803 imported from England by the new regime and located in the Cuban National Centre for Scientific Research (CENIC), where the Perspective Plan team went to formulate their projections.⁹ They also relied on technical and scientific journals passed on to them by technicians or libraries which were subscribed since before the Revolution.

They were assisted in this by a small team in the Department of Scientific-Technological Information, set up within MININD in 1962, the first of its type to exist in Cuba. The Department got hold of all the specialist magazines and scientific abstracts they could from anywhere in the world, translated them and conveyed information about the latest technologies to specific sectors within the MININD apparatus. They were also directed to search for specific information by the ECs or research institutes. Maria Teresa Sánchez, the director, explained:

‘People would go to Che with ideas, for example, they could say “I have discovered continuous movement” and we had to find out if it existed and if it was possible. We used magazines of abstracts for medicine,

⁹ The multinational corporations in Cuba, including the oil refineries, had IBM punch machines, but not computers.

technology, pharmacology. In the beginning I had to submerge myself in the little that existed in Cuba. Later we developed exchanges with friends in other countries... We did all this work by hand. We didn't have a computer or an IBM machine.'¹⁰

The Department began with four people, but gradually expanded to include an archive and departments for photography and translations. Sánchez said: 'They sent me a group of some of the first youngsters to learn languages such as Czech, French and English. I don't remember anyone studying Chinese at that time.'¹¹ The Centre assisted the research and development institutes to set up their own information centres.

In March 1965, the Plan Perspective team produced a two-volume document. Figueras recalled: 'It was the last night that we spoke when Che revised the final version. He said "tomorrow you go with my guards to get it printed in secret; 25 copies and you give them to me."¹² One month later, Guevara left Cuba and MININD was gradually split into separate ministries.

Nine research and development centres were set up within three years in MININD:

- 1961 Commission for Mechanisation of Sugar Industry
- 1961 Cuban Institute of Mineral Resources
- 1962 Cuban Institute of Mineral and Metallurgy Research
- 1962 Office of Automation and Electronics
- 1963 Cuban Institute for Research into Sugar Cane Derivatives
- 1963 Cuban Institute for the Development of the Chemical Industry
- 1963 Cuban Institute for Technological Research
- 1963 Cuban Institute for Machinery Development

¹⁰ Maria Teresa Sánchez, interview, 8 March 2006.

¹¹ Maria Teresa Sánchez, interview, 8 March 2006.

¹² Miguel Figueras, interview, 27 January 2006. MININD's Annual Report for 1964, includes a plan for industrial development 1966-1970, but stated that in late 1964 work began to project development in some manufacturing branches over a 15 year period. It is likely that this was the 'secret' project which Figueras was leading. *Memoria Anual 1964*, Ministerio de Industrias, Republica de Cuba, 70.

1963 Ciro Redondo

In 1964 research institutes in MININD accounted for 53.2% of the ministry's total costs, at \$42,566,100 pesos, reflecting how they were prioritised. Tirso Sáenz was Vice Minister of Technical Development, responsible for all of this apparatus except the Commission, which was created by the Office of Special Issues. He said: 'Every one of these institutes had a reason to be created, some of them directly with the four basic lines of development; metallurgy, naval construction, electronics and sugar cane derivatives.'¹³ The institutes were located outside the ministry building but they were integrated under the same organisational structure and financed under MININD's BFS, receiving a planned budget for investments and salaries, assuming the same principles, but operating with some independence. For the purpose of analysis the research apparatus has been divided into three categories: first, those concerned with the sugar industry; second, those involving the extraction and exploitation of natural resources, minerals, metals and agricultural products, excluding sugar; third, naval construction, electronics and automation. Sáenz also pointed out that: 'All those institutes were created with important support from the socialist countries. That has to be said, because it would be unjust not to recognise that. Che was aware of that.'¹⁴ The technological characteristics of Soviet bloc trade and assistance is briefly examined below.

SOVIET BLOC TRADE AND TECHNICIANS

'Many factories turned out to be inefficient, because we depended on what the Russians and the socialist camp had achieved and they were behind. You could say these factories were obsolete. This wasn't Che's fault. The Yankees wouldn't sell us factories. Che said "these factories

¹³ Sáenz, interview, Havana, 7 January 2005.

¹⁴ Sáenz, interview, 2005

are obsolete, but they are factories” and we had to make more effort, it was more work for the country.’¹⁵

Compounding the mistakes associated with the ISI policy was the relative backwardness of equipment purchased from the socialist bloc compared to the advanced capitalist countries. As the US government pressurised other capitalist countries not to trade with Cuba, *real politik* forced Guevara to accept technology which was two decades behind that existing in advanced sectors of Cuban industry in 1959. The socialist countries also provided credit, advisors, technicians and other specialists. In 1962, Guevara announced:

‘The Soviet Union granted us one hundred million pesos for the iron and steel industry, some electrical plants, a refinery and for geological prospecting of one-fourth of the national territory. Czechoslovakia did this for an automobile plant. China granted us 70 million for the construction of 24 plants of various types; Romania 15; Bulgaria five; Poland 12 and GDR offers ten for 1963. The most important plants contracted, in addition to those already cited, are: a shipyard that has been made with Polish assistance; a nickel plant, with additional Soviet assistance; the textile factories acquired from the Chinese People’s Republic, and those of cement.’¹⁶

All MININD vice ministers and directors were assisted by socialist bloc specialists or Latin American communists trained in the Soviet bloc. Guevara listed the assistance of USSR technicians in the Cuban petroleum industry, Czechs who helped found Cuba’s Academy of Sciences, Bulgarians and Chinese who assisted in the agricultural branch and Koreans who helped in mechanical plants.¹⁷ They gave training courses on operating the new plants. By end of 1964 there were 640 foreign technicians working in MININD, of whom 492 were sent from the socialist bloc and

¹⁵ Edison Velázquez, interview, 21 January 2006.

¹⁶ Guevara, *Tareas*, 100.

¹⁷ Guevara, *INPUD*, 319-320.

the remaining 148 contracted directly from various places.¹⁸ Most of these were assisting in training and the research and development institutes examined below. In 1964-5, around 2,000 Cubans received on site training for plants in construction.¹⁹ Meanwhile, hundreds of Cubans went to study and train in the Soviet bloc. On 31 December 1964, MININD had 1,271 Cubans training abroad, of whom 858 were studying in university, 222 on technician training, and 191 doing workers qualifications.²⁰ Guevara recognised the advantage enjoyed by Cuba through this socialist bloc assistance, which softened the blow of the blockade and helped to secure and consolidate the Revolution:

‘We work in conditions infinitely superior to those of the first socialist country. The Soviet Union did this alone; without friends, without credit, surrounded by ferocious adversaries, in the middle of an intensifying struggle, including within their own territory. We do this in far superior conditions than those of the People’s Republic of China, and those of the peoples’ republics of Europe, which came out of destructive war and without the Soviet Union being able to bring much assistance because it was also engaged in a enormous task of reconstruction... and we also do it starting from a relatively comfortable situation with the educational, technical, cultural and economic level of the masses who are not so backward as what confronted other fraternal countries.’²¹

Guevara did not criticise the Soviets for the relative backwardness of their technology *per se*. Rather, he was critical of the contradiction between the high level of research and development applied to military technology and low investment in improving civilian production.²² And he objected to the ideological resistance to transferring the most advanced technology from the capitalist world. He told MININD directors that: ‘the error of not taking the highest technology at a given

¹⁸ *Memoria Anual*, MININD, 78.

¹⁹ Sáenz, *El Che Ministro: Testimonio de un Colaborador*. La Habana : Ciencias Sociales, 2005, 206.

²⁰ *Memoria Anual*, MININD, 78.

²¹ Guevara, *Tareas*, 118.

²² Orlando Borrego Díaz, interview, 30 November 2005.

moment has cost a lot for some socialist countries; it has cost them in terms of development, and in terms of their competence in the world market.²³

Cybernetics was one example. Invented by Norbert Wiener, a US mathematician studying artillery fire during the Second World War, Cybernetics combines aspects of physiology and human anatomy to study communication and control, involving regulatory feedback in living organisms, machines, organisations and combined systems; 'sociotechnical' systems such as computer controlled machines, automata and robotics. Jorge Ruiz Ferrer a founding member of the Department of Industrialisation, shared Guevara's enthusiasm for cybernetics, and claimed that he was one of the few people in Cuba at that time who could discuss this with Guevara.²⁴ As early as 1962, Guevara had criticised the Soviet's rejection of cybernetics on ideological grounds:

'For a long time Cybernetics was considered a reactionary science, or pseudo-science. Naturally cybernetics can be given a series of reactionary philosophical implications; but that aspect that does not interest us... Cybernetics is a branch of science that exists and that should be used by man. It has not been developed with sufficient effort. However, the north-Americans have worked with this a lot, they have worked a great deal at its practical industrial application, to the extent that they have many things that are automated.'²⁵

This was part of Guevara's notion that technology does not have an ideology *per se*.²⁶ He said: 'a tractor has a function: to plough...and if we are going to take technology, why are we going to take the technology of a socialist tractor in place of a capitalist one, if the capitalist one is better?'²⁷ Guevara's criticisms were aired internally in MININD, but he also criticised the revolutionary government's first purchases from

²³ Guevara, *Bimestrales*, 14 July 1962, 289.

²⁴ Ruiz, interview, 5th April 2006. Ruiz developed cybernetics later as Vice Minister for Minerals, Fuel and Metallurgy.

²⁵ Guevara, *Bimestrales*, 28 September 1962, 318-9.

²⁶ See chapter 8.

²⁷ Guevara, *Bimestrales*, 21 December 1963, 422.

the Soviet bloc of plants based on already out-dated technology. These mistakes had been painful for the country.²⁸ New countries entering socialism, Guevara predicted, would adopt the technology and administrative techniques of the capitalist system which preceded them.²⁹ The origin of the BFS system lay in the capitalist corporations of pre-Revolution Cuba and it was therefore more progressive than the Soviet Auto-Financing System (AFS) which was developed from 1920s pre-monopoly Russian capitalism.

Evidently there was some success in Guevara's resolution to not repeat those mistakes. In summer 1964, inaugurating a factory for domestic utensils, Guevara told the workers that some equipment installed in the factory was world leading: 'And we see also that, together with our Czechoslovak comrades, we have not vacillated in acquiring some special machinery from other countries, including capitalist ones, when it was most useful because that country had developed specialised technology.'³⁰

In addition to the relative backwardness of Soviet technologies was the problem of technological incompatibility. In 1961, Sáenz had been director of the petroleum industry. He explained the daily problems resulting in that industry from the blockade and the consequent shift in trade relations:

'Soviet petroleum is different from the Venezuelan oil that we had received before. Refineries are designed according to the type of oil they are going to process. They were completely different and the Russian petroleum had a higher content of salts and sulphur. The corrosion problems were terrible. The crude was eating away all the pipes and equipment and we had the blockade so we couldn't get spare parts from anywhere.'³¹

²⁸ Guevara, *Bimestrales*, 9 March 1963, 344-5. Guevara said new investments must consider world productivity, see chapter 7.

²⁹ Guevara, *Bimestrales*, December 1963, 421.

³⁰ Guevara, *INPUD*, 67-68.

³¹ Sáenz, interview, 2005.

Ultimately Guevara's solution was to overcome trade dependency by fostering industrialisation based on endogenous resources. The following sections examine the aims, problems and achievements of the apparatus set up to initiate this process. Guevara did not discuss the research and development centres in the MININD bimonthly meetings, therefore the material has been pulled together from annual reports, tasks for the pending year, a handful of written accounts and from interviews.³² While the following section has less analysis than others in this thesis, the important contribution has been to reconstruct a comprehensive record of the objectives, obstacles and achievements in this area.

THE SUGAR INDUSTRY

'Without sugar, there is no nation' – José Manuel Casanova, Sugar Mill Owner's Association.

'Because of sugar, there is no nation' – Raúl Cepero Bonilla, Cuban economist.

'Without workers, there is no sugar' – Lázaro Peña, Cuban Workers Confederation.³³

Cuban historian Manuel Moreno Fraginals prefaced his seminal work on the Cuban sugar industry with the claim that: 'without an exhaustive study of the sugar economy, there is no possibility of interpreting Cuban history.'³⁴ It is beyond the scope of this thesis to examine this aspect of Cuba's historical development. However, to appreciate the motivation, significance, obstacles and achievements of MININD's attempts to modernise, two characteristics of the Cuban sugar industry are summarised. First, the domination of the Cuban economy by the sugar industry:

³² Interviewees explained the lack of discussion about the institutes in the bimonthly meeting by stating that the function of those meetings was to focus on theoretical issues and immediate production problems, not scientific and technological investigations.

³³ All quotes from the 1940s, cited by Marifeli Pérez-Stable, in *The Cuban Revolution: Origins, Course and Legacy*, England: Oxford University Press, 1999, 14 & 36.

³⁴ Manuel Moreno Fraginals, *The Sugarmill: The Socioeconomic Complex of Sugar 1790-1869*. London: Monthly Review Press, 1976, 9.

sugar exports, including by-products, accounted for 80% of exports, making Cuba the world's largest exporter of sugar in 1959; sugar companies controlled 70 to 75% of arable land in Cuba, half of which they left fallow, they employed 25% of the Cuban labour force, but only 25,000 full time with around 500,000 workers hired for the labour intensive harvest lasting two to four months, afterwards dismissed for the *tiempo muerto* (dead season). Underemployment was integral to the sugar industry and plantation workers constituted a rural proletariat with a history of class-conscious militancy.³⁵ Second was the domination of the sugar industry by US interests. In the 1920s, US-owned sugar mills produced and processed nearly two-thirds of the Cuban sugar crop. Following the Great Depression of 1929, domestic ownership of the industry increased to 59% by 1955.³⁶ However, 80% of total Cuban sugar exports were shipped to the US in exchange for commodity imports which dominated Cuba's internal market. The US-imposed sugar quota contributed to the stagnation of the industry, as a disincentive to investment. The World Bank warned that: 'Cuba's standard of living...depends mainly on an industry which stopped growing many years ago.'³⁷

For Cubans, the sugar industry was associated with slavery, racism, poverty, unemployment, underdevelopment and imperialism. Consequently, the first instinct of many in the post-1959 regime was to run the industry into the ground, and replace it with agricultural diversification, manufacturing and heavy industry.³⁸ However, as planning was implemented and control established, the government conceded to a development strategy where sugar exports were the mainstay of capital accumulation. In 1963, Guevara explained why:

³⁵ The description of plantation workers as 'rural proletariat' is disputed by some historians. For examples of historians who use this class categorisation see Moreno Fraginals, 'Plantation Economies and Societies in the Spanish Caribbean, 1860-1930' in L Bethell (ed), *Cambridge History of Latin America*, vol IV. Cambridge: Cambridge University Press, 1986, 187, fn 1 & Samuel Farber, *The Origins of the Cuban Revolution Reconsidered*, North Carolina: North Carolina Press, 2006, 14.

³⁶ US Department of Commerce. *Investment in Cuba: Basic Information for United States Businessmen*. Washington, DC: GPO, 1956, 37.

³⁷ International Bank for Reconstruction and Development. *Report of the Mission to Cuba, July 1951*. Washington, DC: Office of the President, 5.

³⁸ Edward Boorstein, Boorstein, Edward. *The Economic Transformation of Cuba: A First Hand Account*, New York: Modern Reader Paperback, 1968, 205.

'The entire economic history of Cuba has demonstrated that no other agricultural activity would give such returns as those yielded by the cultivation of the sugar cane. At the outset of the Revolution many of us were not aware of this basic economic fact, because a fetishistic idea connected sugar with our dependence on imperialism and with the misery in the rural areas, without analysing the real causes: the relation to the unequal balance of trade.'³⁹

With favourable trade deals with the socialist bloc, based on above world prices of sugar, the revolutionary government believed it had redressed the unequal balance of trade.⁴⁰ Nonetheless, as long as sugar production remained vital to Cuban economic development, Guevara was determined to mechanise its cultivation and develop a secondary manufacturing and chemical industry on the back of it.

Incentives to mechanise

*'It was a hot day. It was already eleven in the morning and by this time everyone was tired, but they had not finished cutting parts of the cañaveral [cane field], which means that the cane can't be picked up. Che sat down to rest in the shade. When people saw this they stopped working too. I explained to him why you had to finish the cañaveral. He said: "Damn, I am going to get up and cut cane; but this is slave's work, this has to be mechanised!"'*⁴¹

There were three incentives to mechanise the sugar cane harvest. First, the shortage of *macheteros* (cane cutters), following the post-1959 rural-urban migration as the real wages rose and employment was created. Voluntary labour was mobilised as a short term solution. 200,000 volunteers joined the harvest from 1961. The long term solution was mechanisation. Second, to humanise the work, so that in the near future:

³⁹ Guevara, cited by Brian H Pollit, 'The Rise and Fall of the Cuban Sugar Economy' *Journal of Latin American Studies*, Vol 36 (2004), 323, fn 6.

⁴⁰ The concept of the 'free' or world market price of sugar is a misnomer; it applied to only 10-15% of internationally traded sugar. Most sugar was produced to quotas and sold for predetermined prices.

⁴¹ Alfredo Menéndez, interview, 11 February 2005.

‘those who speak of cutting by hand, loading by hand, would be considered to be proposing inhumane, bestial work, something from the past which could not return’, said Guevara in 1963.⁴² Third, to cut the costs of production and raise productivity, to: ‘give us the opportunity to compete in the war of prices that the capitalist distributors wage against us. Right now, the struggle to lower the costs of production of sugar is of primary importance as an industrial task.’⁴³ This would be achieved by mechanisation of the harvest and the development of a derivatives industry to increase the value added to sugar as a raw material. Both of these projects are examined below.

There had been attempts pre-1959 to mechanise the sugar harvest, but these had been hindered by resistance from *macheteros* who relied on this back-breaking work to survive. For example, a Soltan cane cutting machine was imported by a large mill in Camagüey, but the workers refused to use it and it was abandoned for years. The Francisco Sugar Company had begun to build equipment to export *azúcar a granel* (crude sugar transported in bulk).⁴⁴ One of these was a terminal in the port at Matanzas and the other in a warehouse in Camagüey, but workers opposed their use. It was the same with the *centro de acopio* (to dry-clean sugar cane) under construction in Camagüey. These are examined below.

Paradoxically, the technical characteristics of the harvest meant mechanisation could reduce the efficiency and profitability of the industry. This is because the ratio of dead weight (soil and straw) to sugar, falls if the cane is hand cut and stripped of excess by the *machetero* in the field before it enters the mill.⁴⁵ The labour intensive work made the industrial processing more efficient. Mechanically cutting the cane, or hand-cutting but mechanically retrieving it without manual cleaning, necessitates an additional cleaning process off the field, but as cane covered in excess weighs more

⁴² Guevara, ‘Discurso en la Plenaria Nacional Azucarero’, 9 February 1963 in *Ciencia*, 151.

⁴³ Guevara, *Tareas*, 108.

⁴⁴ Special equipment was required to load the ships in Cuba and to unload them in the destination port. This technique presented a huge saving on jute sacks made in India in which the sugar was previously packaged. Miguel Ángel Duque de Estrada Ramos, interview, 23 February 2005 and email correspondence, Arcos, 10 December 2006.

⁴⁵ ‘In the 1960 harvest, 47 millions tons of cane had to be moved in 87 days to produce 5.9 million tons of sugar.’ Boorstein, *Transformation*, 207.

this adds to transport costs. Furthermore, mechanised cutters damaged the cane so it had to be replanted more frequently. These problems could have been overcome pre-1959 only with serious investment in research, capital goods and transportation infrastructure. That would have raised the costs of production for private capitalists, while the plentiful supply of cheap labour kept costs down. Most of the value-added to sugar was in refineries and sugar-based manufacture, largely controlled by US interests who lacked incentives to mechanise the harvest.

The minor feats accomplished by Guevara's mechanisation project were perhaps more significant in assuaging resistance to mechanisation, than in productive advances. The fact that militant sugar workers dropped their resistance to mechanisation demonstrated their confidence that the Revolution would provide alternative employment and social welfare. As Miguel Duque Estrada de Ramos, who led the mechanisation task force explained: 'In the epoch of the Revolution, these machines did not mean unemployment.'⁴⁶ Young *macheteros* moving into Havana to study and work would not want to return to manual labour in the countryside, they did not oppose mechanisation, and *machateros* themselves contributed to the project to construct cutters, retrievers and cleaners. A task force was created to initiate and direct the mechanisation project.

1961 Commission for the Mechanisation of the Sugar Harvest

*'Have you seen film footage of Che cutting cane? That was one of the first prototypes. He was struggling to breathe. So many people were sceptical about it that Che wanted to show that it was a possibility and he knew that if he went to cut the cane then the spotlight would be on it. But he had to pay a price for that. The dust of the sugar cane was terrible for him. Che was one month, 30 days cutting cane, with a terrible asthma attack!'*⁴⁷

⁴⁶ Duque, interview.

⁴⁷ Sáenz, interview, 2005.

The Commission for the Mechanisation of the Sugar Harvest, set up in early 1961, was headed by Duque. Guevara told Duque to offer material incentives to technicians, engineers and mechanics and sugar workers in the industry to develop machinery.⁴⁸ The first problem was the lack of materials. The blockade was already hurting and the mechanics base which was fostered by Guevara around 1963-4 did not yet exist. The Commission worked in the workshops of the old mills throughout the country. Duque pointed out that: 'Che knew the task of mechanisation would take a long time, but he believed that you had to make a start quickly in order to complete it.'⁴⁹

Despite the obstacles, within one year the Commission had built 500 *alzadoras* (retrievers) for the following harvest. 5,000 were produced in total. The *alzadora* picked up the piles of cut cane to load them onto the mill transportation. *Macheteros* were paid piece-work, and initially they feared that the *alzadores* would disrupt this system, but a solution was reached whereby workers continued to mark their piles, honouring the piece-work system.⁵⁰ Next the Commission moved on to cane cutters and despite the blockade, Guevara managed to import a US and an Australian model, to examine how they worked, in order to adapt the design to build on top of tractors which the Revolution was able to import.⁵¹ Duque explained the complications involved: 'Some machines only work on erect cane, others won't pass over ditches in the irrigated lands, and stones can break the blades of the machines. Adapting the cutters to Cuban conditions was a long process.'⁵²

However, the Commission had no intention of working towards perfection before introducing the cutters. It took nine months to create an enterprise to construct the machines, but with the cooperation between the mechanics and around ten engineers including Czechs, Hungarians, Argentinians and one Bulgarians, 600 of these simple models were built in the first year. The machine had problems, but it was a start and

⁴⁸ Duque, interview.

⁴⁹ Duque, interview. See also Borrego, *El Camino del Fuego*. La Habana: Imagen Contemporanea. 2001, 233-5.

⁵⁰ Menéndez, interview, 17 February 2005.

⁵¹ Borrego, *Camino*, 235.

⁵² Duque, interview.

it was used in the harvest of 1962-1963. Guevara himself pioneered tests on the machine, so he was well aware of its deficiencies. He applied socialist emulation to the tests, to provoke enthusiasm. Borrego recalled that Guevara challenged him to a competition on the first machines: 'We began a 6am helped by some compañeros who had worked in the construction of the machines. The task finished at 6pm, with just 15 minutes break after the first six hours... when we finished, almost at dusk, Che appeared jubilant, and with his short breath [from asthma] he spoke about the advantages and disadvantages of the cutter and ending by saying that the battle to mechanise cane was being won.'⁵³

Speaking to sugar workers mid-harvest, Guevara said the cutters were in the experimental stage and explained initiatives underway to improve them: 'The cutter, as it is today, is cutting cleaner than the average *machetero*', he said, urging the workers to make constructive criticisms to help improve the machine.⁵⁴ He described his own experience days previously when the machine blades broke, injuring a compañero: 'the machine is dangerous' he warned. His audience applauded when he announced that he had cut 45,000 arrobas in one week [495 metric tonnes], to which he replied: 'I don't tell you for the applause, but rather to put the example here and show you my record so that you break it tomorrow: 45,000 arrobas, a new operator, without attending a school!'⁵⁵ Guevara's commitment to leading by example as a management technique; engaging workers via fraternal competition, known as socialist emulation, meant he had to engage on a practical level in these daily tasks. Guevara's final record was to cut 22,000 arrobas in one day.⁵⁶

In 1961, Guevara instructed Alfredo Menéndez, director Consolidated Enterprise (EC) of Sugar, to locate the Cuban engineer Roger López, who, before the nationalisation of the sugar industry, had been designing the equipment to transport *azúcar a granal* in Camagüey. López had already requested to leave Cuba for the US, but Menéndez asked him to stay long enough to finish the project. He agreed:

⁵³ Borrego, *Camino*, 236.

⁵⁴ Guevara, 'Discurso en la Plenaria Nacional Azucarera', 9 February 1963, in *Ciencia*, 129.

⁵⁵ Guevara, cited by Borrego, *Camino*, 315.

⁵⁶ Duque interview & see Borrego, *Camino*, 315.

‘because he wanted to see his work finished’.⁵⁷ MININD provided him with a car and a revolutionary engineer to shadow him both to learn and ensure he did not carry out sabotage. When the work was complete, Guevara facilitated the engineer’s exit to join his family by Christmas. Menéndez said: ‘the engineer explained that if he had been treated in the way Che had treated him since the beginning, he would have stayed in Cuba, but that his family was already over there.’⁵⁸ Guevara said they were welcome to return. Just as Guevara believed that technology *per se* had no ideology, he also believed that technical skills could be exploited for the benefit of the Revolution regardless of the ideological affiliations of the technicians. As a result the *azúcar a granal* equipment was inaugurated in Cuba, which private capitalists had been unable to introduce before the Revolution due to workers’ resistance.

There was a similar story in relation to the *centro de acopio*. As explained, mechanising the cutting and retrieving of cane would necessitate a mechanical cleaning process before the cane was processed. Duque recalled that before 1959: ‘an engineer in Camagüey had designed a plant to ‘dry clean’ the cane with air to remove the earth and straw. Better if the cane was burnt, but it could also be used with green cane [unburnt].’⁵⁹ His design was abandoned after workers opposition pre-1959. A Canadian engineer Robert Henderson Kernel, assisted the Mechanisation Commission to complete the construction of the *centro de acopio*. Henderson stayed to inaugurate five *centros de acopio* as well as working on a combine harvester, mounted on a bulldozer, which cut a whole furrow of cane in one go. This machine was built for a specific type of cane and was never generalised.⁶⁰ By 2005, Cuba had 680 cleaning *centros de acopio*, distributed throughout every sugar production unit in the country.⁶¹

For Guevara the importance of the Commission was not just measured in concrete results, but also the Revolution’s audacity in working towards complex goals. He told sugar workers:

⁵⁷ Menéndez, interview, 17 February 2005. Also, email correspondence, Arcos, 14 December 2006.

⁵⁸ Menéndez, interview 11 February 2005.

⁵⁹ Duque, interview.

⁶⁰ Duque interview.

⁶¹ Sáenz, *Ministro*, 167.

'...objectively the cane cutting machines represent a triumph for the Revolution, the demonstration of its capacity to focus its forces in order to resolve problems, and the prediction that in the next few years we can have thousands of cane cutting machines, and what is more, that we will go on improving their design year on year to give them better capacity and more effectiveness.'⁶²

The mechanisation project continued after Guevara's departure from Cuba, although not more than 1% of the harvest was mechanically cut in 1970.⁶³ However with Soviet assistance from the 1970s onwards and increasing use of Cuban components in new combines, by 1990 that figure had reached 71%.⁶⁴ In 2004, Fidel Castro announced: 'today, there is no one left that cuts sugar cane by hand.'⁶⁵ Guevara's ambitious project was achieved in Cuba's most important productive sector. In addition, the introduction of this machinery to the sugar harvest meant *macheteros* had to develop mechanical skills for the purpose of maintenance, thus upgrading their work.

1963 Cuban Institute of Research into Sugar Cane Derivatives (ICIDCA)

*'...the day will arrive when the derivatives of sugar cane have as much importance for the national economy as sugar has today.'*⁶⁶

Guevara argued for maintaining pre-1959 levels of sugar production whilst developing manufacturing and chemical production based on sugar as a raw material, creating a vertical integration of primary and secondary sectors of the economy, increasing the value of sugar industry exports. To this ends, the Cuban Institute of Research into Sugar Cane Derivatives (ICIDCA) was set up and headed by Miguel

⁶² Guevara, 'Discurso en la Plenaria Nacional Azucarera', 17 December 1962' in *Ciencia*, 127.

⁶³ Pollit, *Sugar*, 324.

⁶⁴ Pollit, *Sugar*, 327.

⁶⁵ Fidel Castro Ruz, speech on 60th Anniversary of his admission to University of Havana, in the Aula Magna of the University of Havana, on 17 November 2005.

www.ratb.org.uk/html/cspeaks/fidel_1105.html.

⁶⁶ Guevara, inscription at the entrance of ICIDCA in Havana.

Urrutia, a chemical engineer graduated in the US and nephew of the Republic's first president.⁶⁷

The principal by-product was *bagazo*, the cane after the juice has been squeezed out. It had long been used as fire fuel in the mills. But Guevara argued that it could be manufactured to make cardboard and paper, synthetic fibres including rayon, and *fulfural* which has multiple uses in the medical industry, cosmetics and animal feed, the syrup from the cane juice could make alcohol, such as rum. If this could be achieved, it would create industrial zones around the mills in the countryside, bringing employment and development to those areas. MININD's own publications were produced from *bagazo*. Menéndez pointed out the lack of research carried out anywhere in the world on sub-products of sugar. The technology required for such a comprehensive derivatives industry hardly existed, so it could not be imported. The project was largely dependant on the ICIDCA's ability to develop its own technology. Given the lack of scientists and technicians and the absence of a mechanical base in Cuba, advances in this field would clearly be made very slowly and only with massive investment: 'The problem was the cost of the technology, which would prevent us competing in the market' explained Menéndez.⁶⁸ As Vice Minister for Technical Development, Sáenz oversaw the ICIDCA. He said Guevara's vision was not fully appreciated by his colleagues: 'Che said let's produce products with more value added than sugar, so that sugar is a sub-product and plastics, pharmaceutical drugs and so on, are the main products. But I think we missed the point at that time, and now it is too late.'⁶⁹

A 1964 report, however, demonstrated that the short term expectations on the ICIDCA were not so ambitious: 'the future of the ICIDCA is in the growing emphasis on the processes of fermentation that would allow the Institute to have advanced technology in this area.'⁷⁰ The ICIDA had the assistance of East Germany. Sáenz said one of the important achievements of the institute was in developing

⁶⁷ Sáenz, *Ministro*, 168-171.

⁶⁸ Menéndez, interview, 11 February 11 2005.

⁶⁹ Sáenz, interview, 2005.

⁷⁰ 'Informe del Instituto Cubano de Investigaciones de los Derivados de la Cana de Azucar', in *MINAZ*, Vol, 6. 101

research centre technology, experimental areas, pilot plants and prototype workshops. For example, a pilot plant for extracting dextrane from cane was set up in an old US-owned mill. Sáenz affirmed that: ‘the advance made in the ICICDA in the first years was notable. Che was very satisfied with the results obtained and had a high opinion of the work carried out.’⁷¹ In June 1964, the EC of Sugar spilt off from MININD to become the Ministry of Sugar (MINAZ), headed by Orlando Borrego. The ICIDCA passed over to MINAZ’s jurisdiction where it remains today. Luis Gálvez, a man Guevara once called ‘the administrator of the future’ has been its director for 30 years.⁷²

MINERALS, METALS AND AGRICULTURE

The precondition for industrialisation was the development of a mechanical base in Cuba and, consistent with Guevara’s vision of development based on endogenous resources, this necessitated the expansion of metal extraction facilities in Cuba, which has the world’s second largest known reserves of nickel. The story of the Nícaro nickel mine is both an exemplary and exceptional example of the problems and achievements of Guevara’s efforts to develop the metallurgy sector of the economy. The nickel story illustrates several vital and recurring themes: Guevara’s ambitiousness, the technical backwardness of MININD personnel, the need for collaboration from industry workers, the dependence on technicians regardless of their political affiliations, and the aspiration to apply the best capitalist technology and experts.

Before the Revolution there were two nickel mines in Cuba, both in Oriente. Nícaro was owned by the US government and Moa was owned by a private US company. The metal was sent to the US for processing. Guevara was aware of how the US had defended its interests in the sector under Batista’s reign. The US government, he revealed, had drafted the \$180 million concession for investment to be granted to

⁷¹ Sáenz, *Ministro*, 171.

⁷² Luis Gálvez, interview, 9 February 2006 & Sáenz, *Ministro*, 55.

Moa and Nícaro by the pre-1959 Cuban government.⁷³ Nícaro was founded in 1943 during the Second World War and expanded in 1952 during the Korean War for military purposes. It employed 4,000 workers in continuous production and the plant had its own electricity supply. A magnesium plant at Nícaro, called Felton, had another 400 workers. The plant at Moa was more modern, employing 1,600 workers, also in continuous production. Moa was the last plant finished by US interests in Cuba. It opened in 1958 and was abandoned in 1959. Restarting production at Moa was a major achievement. Meanwhile production was expanded at Nícaro during Guevara's time as minister.

According to the Cubans, the US government assumed that the Revolution would be incapable of operating the mine at Nícaro, since the US technicians had left the island and the resources vital for production, particularly ammoniac, were imported from the US. 'The technological dependence of the nickel industry on the US was total', stated Borrego.⁷⁴ Paralysis would have been politically, as well as economically disastrous for the revolutionary government, leaving 6,000 workers, including skilled workers, out of work. Their families and the towns built up around the mines depended on their income. With few engineers and technicians among its ranks, the Revolution relied on the support and collaboration of the mine workers themselves to re-establish production. One Cuban engineer Demetrio Presilla, played an essential role at Nícaro.⁷⁵ In 1960, Benjino Lorenzo Regueira Ortega became head of the Cuban Mineral Institute (ICM), under the National Institute of Agrarian Reform (INRA). Although this was not under his jurisdiction, Guevara advised Regueira to travel to Oriente to work with Presilla. Regueira had been on the trade mission to the socialist countries with Guevara in 1960, following which the USSR sent a team of specialists to assist Cuba at Nícaro, motivated by their own interest in Cuban nickel exports. Regueira explained that Presilla initially refused to co-operate with the Soviets, affected by years of anti-communist propaganda, but finally he

⁷³ Borrego, *Camino*, 17 & 140-141.

⁷⁴ Borrego, *Camino*, 141.

⁷⁵ According to Benjino Lorenzo Regueira Ortega, Presilla, who was mixed-race with a black wife, decided not to go to the US because of racism in that country, interview, 16 January 2006. Presilla's contribution was highlighted by several interviewees.

agreed to collaborate: ‘not because of me, but because of his respect for Che’, added Regueira.⁷⁶

In January 1961 Guevara spoke to the workers at Nícaro, warning them of impending US or émigré invasion, urging them to increase their output in response to the threat, promising they would all benefit from the literacy campaign, which in turn would improve production. Borrego recalled: ‘He finished by saying that it was much easier to die in a trench fighting the enemy than to work with maximum effort for 365 days of the year.’⁷⁷ From February 1961, responsibility for mining was transferred to the EC of Mining in MININD. Guevara immediately set up the Cuban Institute of Mineral Resources (ICRM) to carry out important research work in cooperation with the EC. The nickel story demonstrates how Guevara fostered collaboration between the research institutes and the ECs for production. New mines were opened up, with co-ordinates provided by the ICRM directed by Jesús Suárez Gayol.⁷⁸ In addition a railroad and other facilities were built to accompany the new mine, with equipment bought in the USSR and England.

From 1963, the administrator at Nícaro was Gálvez, a young chemical engineering student, who had previously turned around the EC of Cement.⁷⁹ Gálvez was sent there to deal with problems created by the desertion of key engineers who left for the US and because socialist bloc assistance was not very effective. He said: ‘My main role was to get a good understanding of that complex technology, to establish good relations with the workers and take a lead in the technical side. I had the factory and the mine 20 kilometres away. I practically lived in the factory.’⁸⁰ Workers at these mines received special rations and higher salaries, in recognition of the danger and intensity of their work – they sometimes worked consecutive shifts – and because their incomes provided for their families, given the lack of alternative employment in the region.

⁷⁶ Regueira, interview.

⁷⁷ Borrego, *Camino*, 140.

⁷⁸ Velázquez, interview, 19 January 2006 & Gálvez, interview. Details below.

⁷⁹ This was before he became director of ICIDCA as cited above as well as vice minister of MINAZ.

⁸⁰ Gálvez, interview.

The ammoniac necessary for extraction of nickel arrived in weekly shipments from the USSR, who also provided credit for the Cubans to buy spare parts from the west.⁸¹ The credit was repaid in nickel. Gálvez recalled that Presilla was keen on initiating a new process of separating cobalt from nickel, which would increase export values as cobalt prices are higher than nickel. The ICRM studied the technology for this process. It was this enthusiasm and drive which made Presilla stand out. Gálvez said: 'He was passionate about his tasks. He arrived at Nícaro early every day to revise the results of the previous day and inform the morning Production Council. He went round with a metal helmet. If he arrived at the Council and threw the helmet on the table we all know things were bad.'⁸² Fidel Castro also consulted Presilla about possibilities for future production. According to Gálvez, they knew each other from the revolutionary struggle in Mayarí, a town near the mine.

The Moa story surpasses that of Nícaro in terms MININD's achievements. Borrego described Guevara's campaign to restart production at Moa as a chess game. First he met with Moa technicians and engineers, most now re-employed in Havana. He asked them to volunteer to return to Moa and when those refusing had dwindled to a minority, he told them they had no choice, they were instructed to return. Back at Moa, with the help of Presilla and the Soviets and frequent visits from Guevara, they prepared to commence production. However, Guevara found out about an Indian engineer T K Roy, who had worked on the complex plant design. He was contacted in the US and agreed to secret arrangements to get him into Cuba where he stayed for one week to help rehabilitate production at Moa. Borrego said: 'this meant the last move in the long awaited checkmate that the Cuban Revolution had given the yankee government in the technological terrain, showing that in this sphere revolutionary daring could be triumphant when you work with intelligence and decision in the face of a powerful adversary.'⁸³

⁸¹ Gálvez traveled to England to buy spare parts with credit provided by the USSR. The parts were purchased from the US by an export agency run by a couple sympathetic to Cuba who acted as secret intermediaries.

⁸² Gálvez, interview.

⁸³ Borrego, *Camino*, 144.

Gálvez said that one of the new mines opened at Sol Libano contained limonitic nickel, a metal composed of iron, nickel, cobalt and silica. There was also serpentine. Mao had more limonitic nickel than serpentine, and at Nícaro it was the reverse. Gálvez explained that both Guevara and Castro aspired to progress beyond the production of nickel, which is an intermediary product, to produce stainless steels for use in the chemical and food industries. This was achieved in the 1980s in Las Tunas, but in Guevara's time the principal achievement was to continue to expand the production of nickel and use its export to the socialist countries, mainly the USSR, to fund investments. By the late 1990s Cuba was the sixth producer of nickel in the world and the fifth biggest producer of cobalt as a nickel by-product. Cuba also produced moderate amounts of ammonia, chromite, gypsum, petroleum and petroleum products, salt, silica sand and steel and sulphur as a byproduct of petroleum, and other construction materials.⁸⁴ The examination of research and development institutes describes the first faltering steps towards these productive achievements.

1961 Cuban Institute of Mineral Resources [ICRM]

*'We must search for our mineral resources... it is a task for everyone. We must prepare many geologists or mine engineers, compañeros who explore practically every square metre of the territory to investigate its potential... and do the industrial preparation to get at those metals... we are thinking of developing this path a great deal, which is why we have created the Cuban Institute of Mineral Resources, which is part of the Ministry of Industries.'*⁸⁵

The ICRM was the first research institute set up under MININD, despite the fact that there were only two geologists in Cuba.⁸⁶ The institute therefore relied on the support of Soviet, Czechoslovakian and Argentinian geologists among others. Its objective was to begin investigations to search and prospect minerals throughout the country,

⁸⁴ Ivette E Torres. <http://minerals.usgs.gov/minerals/pubs/country/1998/9509098.pdf>

⁸⁵ Guevara, *Obreros*, 276.

⁸⁶ Sáenz, interview, 2005. Sáenz, *Ministro*, has details.

which often meant opening up paths to remote areas to transport equipment and construct temporary housing.

The ICRM was established to replace the Cuban Petroleum Institute created after the nationalisation of the petrol industry in 1960, and before significant petroleum reserves were located in Cuba. The Argentinian director of the ICP was transferred to the ICRM, but he clashed with the Soviet and Czechoslovakian scientists, reflecting ideological differences. The annual report on the ICRM reported that these conflicts had held back the work, despite the initiatives of a Soviet scientist called Fiodorov.⁸⁷ The director was replaced by Suárez Gayol, a captain in Guevara's Rebel Army column, who directed one of the two Cuban geologists to conduct research on the mineral and petroleum mines under production, a decision commended by the report. It concluded that: 'we have to give attention to petroleum, because the real possibility has emerged of finding it in some zone. We must continue the investigations in such a way that we can see if it is possible to reduce imports which consume 80 million dollars every year.'⁸⁸ Guevara instructed ICRM to prioritise the search for petroleum and make a geological map of Cuba in 1962: 'with special practical consideration for the economic problems of the country, such as the increase of reserves and the prospecting of supplies of those minerals which substitute imports and would be a source of hard currency.'⁸⁹ In 1964, Sáenz travelled with Suárez Gayol to Cayo Francés to visit a five-metre deep oil well, the deepest found at that point. In 1965 the ICRM was instructed to initiate a programme, with modern methods and equipment, to search for reserves of nickel, copper, chrome and non-metallic metals, as discussed above. With Guevara's help Suárez Gayol organised peoples' explorations, with the intention of enthusing and integrating young Cubans with the search for minerals. In mid-1964, Suárez Gayol left to become Vice Minister of Production in the new MINAZ.

⁸⁷ 'Informe del Instituto Cubano de Recursos Minerales', 11 November 1963, MINAZ, 77.

⁸⁸ *Minerales*, 80. On 10 April 1967 Suárez Gayol died in Bolivia where he formed part of Guevara's *foco* group.

⁸⁹ 'Tareas Generales para 1963', 1962, MINAZ, 591.

In 1964, the book *Geology in Cuba* was published. Guevara had initiated the project to assist in the education and training of new Cuban geologists. He wrote the prologue:

‘...initially the Institute was characterised by the absolute pre-eminence of the geology of petroleum... Lately, it has managed to balance that with...the direct search for oil or for metal and non-metallic minerals, scientific research of a high level or the training of the cadre necessary so that the country can find its own feet in this field.’⁹⁰

Lamenting the lack of Cuban geologists, Guevara recognised the ICRM’s dependence on Socialist bloc assistance, but praised: ‘our capacity to learn from our contact with the most progressive scientists of the most advanced fraternal countries, as much in technology as in organisation.’⁹¹ By 1964, 153 foreign specialists worked in the ICRM. In 1965, Sáenz negotiated 20 million roubles worth of equipment in credit from the USSR for drilling oil.⁹²

Juan Valdés Gravalosa, secretary to MININD Management Council said that Guevara was convinced that Cuba had oil and he suspected it was in the Gulf of Mexico: ‘I asked him if you believe there’s oil in the Gulf, why don’t we go and investigate. He told me that we can’t because the technology for this still doesn’t exist.’⁹³ In 1965 the ICRM began to create the infrastructure needed to drill for oil. By 2003 Cuba was producing four millions tonnes of petrol a year. By 2006, Cuba’s state petroleum company was collaborating on a joint venture with the Chinese government’s Sinopec for deep sea drilling to tap into the Gulf reserves, the existence of which Guevara had predicted.

⁹⁰ Guevara, *Prologo del libro Geología de Cuba*, MINAZ, 741.

⁹¹ Guevara, *Geología*, 741.

⁹² Sáenz, *Ministro*, 157.

⁹³ Juan Valdés Gravalosa, 22 February 2006.

1962 Cuban Institute of Mineral and Metallurgy Research (ICIMM)

*'We have lots of iron... we have nickel, we have cobalt, we have chrome, we have magnesium; there is a set of minerals that permit us to make alloys, to make special metals when we have developed our steel and iron industry, and furthermore, we have copper which is also a really important metal. That means that we have to develop ourselves a lot, to develop with audacity, to go on creating our own technology...here there are no metallurgy specialists, but there can and should be, and this should be one of the great lines of work of revolutionary industry.'*⁹⁴

Cuba is abundant in *lateritas*; reddish ground in humid tropical regions, rich in minerals, iron, nickel, cobalt and albuminate (an alkali compound of albumin). Guevara set up the ICIMM to complement the work of the ICRM. It was dedicated: 'to the tasks of developing and applying new technologies' in the mineral and metallurgy branches, focussing on *lateritas* whilst simultaneously searching for other complimentary non-metallic natural resources, such as magnesium and dolomite, and increasing the extraction of copper for future utilisation in the electronics industry, among others.⁹⁵ Guevara wanted to increase the exportable base of the country and move towards specialisation in the international division of labour of the socialist bloc. In addition ICIMM was to develop technology and investments to expand Antillana de Acero, the iron and steel plant in Havana, to assist a metals plant in Pinar del Río and to instruct the ministry ECs on the development of the iron and steel industry in the west of Cuba.⁹⁶ The experimentation with *lateritas* passed from the EC of Minerals to the ICIMM, which piloted a rotating oven to produce sponge-iron in the institute. Beyond that however, little was achieved, for which Sáenz largely blamed the managerial deficiencies of the Institute's director Faustino Prado. However, Guevara had offered Prado unconditional assistance in his work, despite his lack of ideological affiliation to the Revolution, because of his advanced

⁹⁴ Guevara, *Obreros*, 286-7.

⁹⁵ *Tareas* 1963, MINAZ, 591.

⁹⁶ Sáenz, Emilio García Capote & Gálvez, 'El papel del Che en el desarrollo científico y tecnológico de Cuba', in *40 Aniversario Ministerio de Industrias*, La Habana: Editora Política, 59-60 & Sáenz, *Ministro*, 160-161.

technical level. Finally Prado was transferred to another position but soon left the country. Sáenz conceded that: 'independent of the deficiencies of Prado, it was impossible to achieve technological results of this magnitude with only two or three years of work.'⁹⁷ Gálvez agreed that good results were achieved in separating cobalt from nickel in the pilot plants, but that industrial application would have taken massive investments, which were not available. The USSR was only interested in importing Cuba's nickel, not in manufacturing cobalt, so they lacked an incentive to invest in the technology.⁹⁸

When Guevara left Cuba, the ICIMM was closed down, its functions returned to the pilot plant at Nícaro and the rotating oven transferred for use in a cement factory. Today the Centre for Investigations into the Mineral and Metallurgy Industry carries out this work in Cuba and once again the development of metallurgy that Guevara promoted is receiving investment.

1963 Cuban Institute for Development of Chemical Industry [ICDIQ]

*'The ICDIQ was created to develop the chemical industry...For now this institute should just work to create technology and construct factories to match that technology, that is to say, developing the apparatus and teams necessary. It has to act as the investor organisation in relation to the new plants.'*⁹⁹

The chemical industry was one of the lines of development which Guevara recognised as playing an increasingly important role internationally. He therefore set up the ICDIQ to address the lack of material and intellectual resources in Cuba to foster this sector, based on the islands natural resources, and to collaborate with the EC of Pharmaceuticals. As with the ICIDCA, the chemistry institute was given resources to build its own prototypes, pilot plants, and technological equipment,

⁹⁷ Sáenz, *Ministro*, 163.

⁹⁸ Gálvez, interview.

⁹⁹ Guevara, cited by Sáenz, *Ministro*, 172-3.

reflecting the vital role which Guevara assigned to this industry.¹⁰⁰ The institute was instructed: 'to assure the projection, execution and establishment of chemical plants, such as for the extraction of steroids from cane wax, and the consideration of satellite plants necessary for the supply of primary materials.'¹⁰¹ In 1964 the ICDIQ was to start to develop technology for the extraction of steroids and carotene from the wax of *cachaza*, the outer film of sugar cane.¹⁰² By 1964, a new task was added: 'the development of industrial application of antibiotics, not only for human use, but also for animals.'¹⁰³

In January 1964, Guevara reported that the ICDIQ was established to make the most out of the capabilities of its director Álvaro García Piñera, a chemical engineer who worked on soaps and perfumes for Colgate-Palmolive pre-1959. Like Prado at the ICIMM, García had no ideological affiliation to the Revolution. Sáenz complained that García was leading the institute badly and had taken Guevara's endorsement as *cart blanche* to carry out projects which were unrealistic and irresponsible. Sáenz explained: 'He dared to do things irrationally and he broke the laws of engineering. With a pencil and slide rule he designed an antibiotics plant. That's crazy!'¹⁰⁴ But Guevara dismissed Sáenz suggesting he was jealous. He was drawn by García's proactive attitude and enthusiasm for an industry which was central to modern development but absent in Cuba. In the end Sáenz's assessment was correct and the antibiotics plant, which Garcia had adapted from a yeast factory, never produced a single antibiotic and returned to yeast production: 'The truth is that all the chemical plants that García Piñera had announced and included in the ministry plans also resulted in failure. The technical approach to the projects was very superficial and disorganised.'¹⁰⁵

Vice Minister of Industrial Construction Ángel Gómez Trueba, reflected more positively on achievements in the chemical industry, although it is not clear if he was

¹⁰⁰ Sáenz, *Ministro*, 172.

¹⁰¹ *Tareas 1963*, MINAZ, 591.

¹⁰² 'Orientaciones para 1964', in MINAZ, 612.

¹⁰³ 'Tareas fundamental para el Ministro de Industrias para 1965', MINAZ, 116.

¹⁰⁴ Sáenz, interview, 2006.

¹⁰⁵ Sáenz, *Ministro*, 175.

referring to the heavy and light chemicals branch, which combined 12 ECs, rather than the work of the ICDIQ. Both Trueba and Sáenz mentioned the construction of a fertiliser plant in Matanzas which was brought into production with East German assistance. Another fertiliser plant bought from the British firm Simon Carver was a disaster, said Sáenz, as part of the equipment collapsed after the Cubans had paid for it.¹⁰⁶

Trueba recalled that plants were installed for the production of calcium carbide and he mentioned a contract with the French chemical industry for assistance in the fields of fermentation and sodium hydroxide production that was later cancelled. Trueba's conclusion was equally negative: 'the lack of understanding and internalisation at that this time about this sector had an adverse effect on socialist economic development.'¹⁰⁷ Sáenz speculated that even with a better director at the ICDIQ they were unlikely to achieve better results. Effectively they were starting from scratch, with few scientists, little equipment and scarce capital. Nonetheless a valuable idea and a research methodology was established: 'The idea was excellent, to make an institute with what they call a complete cycle of innovation. The institute develops products at a scale where it can build pilot plants which if successful are turned into production plants.'¹⁰⁸ Despite his long term ambitions, Guevara's initial aim was for the ICDIQ to begin to create the base for a future chemical industry. He may have been swayed by the unrealistic pronouncements of García, but the methodology of constructing laboratories, prototypes and pilot plants remained valid and the innovation cycle is applied successfully in Cuba today at the Centre of Genetic Engineering and Biotechnology. After Guevara's departure García was substituted and, like Prado, he left the country for the US.

¹⁰⁶ Sáenz, interview, 2006.

¹⁰⁷ Ángel Gómez Trueba, 'El MININD en la industrialización socialista de Cuba 1960-1965', *Aniversario*, 43 & 45.

¹⁰⁸ Sáenz, interview, 2006.

1963 Cuban Institute for Technological Research [ICIT]

*'The main task of the ICIT is in agriculture, which will serve as the base for our industrial development and for the maintenance of botanical science... with scientific controls from the planting of the seed until industrial exploitation.'*¹⁰⁹

The ICIT was set up to develop technologies based on agricultural produce. A report in 1962 stated that the ICIT's main task was research which would facilitate import substitution, especially of goods purchased in dollars.¹¹⁰ The approach was to create stronger links between agriculture and industry and to introduce industrial management methods to agriculture in a way which Sáenz claimed: 'anticipated the idea of the future complex agro-industry.'¹¹¹ Directed by Miguel Urrutia before he left to direct the ICIDCA, the ICIT was situated on a large farm where laboratories, pilot plants and workshops were constructed from scratch. The ICIT mainly carried out research at Ciro Redondo, the experimental agricultural centre examined below and its guideline for 1964 stated that the ICIT must prioritise: 'the study of the application of experimental cultivation being carried out in our experimental unit, controlling and improving its internal systems.'¹¹² In September 1964, Sáenz's vice ministerial report stated that the ICIT's principal task was focussing on agriculture as a base for industrial development and the maintenance of botanical science.¹¹³ He concluded that the ICIT had advanced despite its weaknesses and it was instructed to coordinate with the EC of Paint and the EC of Mineral Water and Soft Drinks.

1963 Ciro Redondo

'Che visited the farm "Ciro Redondo" frequently and maintained a special communication with the workers and those in charge. There he instigated the experiments with the new salary system which was part of

¹⁰⁹ 'Informe del viceministro para el desarrollo técnico', MINAZ, 143.

¹¹⁰ MININD, 'Tareas generales del Ministerio de Industrias para 1963', 1962, MINAZ, Vol 6, 590.

¹¹¹ Sáenz, *Ministro*, 176.

¹¹² *Orientaciones 1964*, MINAZ, 611.

¹¹³ VM TD *Informe*, MINAZ, 143.

*his conception of the budgetary finance system, which focussed on the development of consciousness, the education system and a new mentality concerning production as a social duty... he developed a whole set of medicinal plants for the production of medicines, convinced of the future importance of "green" medicine.'*¹¹⁴

Named after a Rebel Army captain who died fighting in Guevara's column, *Ciro Redondo* was a farm in Matanzas which MININD took over to develop as an experimental agricultural station used by the ICIT. Guevara first gave instructions for a farm to be located for MININD to carry out social-productive and botanical experimentation in 1961. In January 1962, 165 students from the School of Army Improvement were selected and sent to an abandoned farm identified for this purpose. Most of the soldiers had been troops in Guevara's Rebel Army column with low educational levels. It was important that the farm be in bad condition so that Guevara's experiment was not interfering with the productive work of the agriculture ministry, INRA. The soldiers' task was to get 200 hectares of the farm producing within one year with little mechanical equipment or other means, and study during the evenings.¹¹⁵ A mathematical physicist, Dr Raúl Arteché Duque, directed the school at the farm.

Ramiro Lastre, one of the Rebel Army troops who worked and studied at *Ciro Redondo*, recalled that 23 varieties of medicinal plants were cultivated on the farm, some of them foreign species. They were used in experiments: 'At one stage we had Chinese scientists, a doctor of science and three agronomy engineers, who lived on the unit with us.'¹¹⁶ There was also collaboration with the Agronomy Experimentation Station in Havana Province, run by two renowned Cuban scientists Juan Tomás Ruig and Julián Acuña Galé. That Station had been set up back in 1904 mainly to experiment with different species of sugar cane.

¹¹⁴ Borrego, *Camino*, 138, also Borrego, interview, 23 November 2004.

¹¹⁵ Sáenz, *Ministro*, 178.

¹¹⁶ Ramiro Lastre cited by Luis Hernández Serrano, 'Un Hacho de Cuaba Multiplicado por Mil' in *Juventud Rebelde*, 7 October 2004.

Guevara pushed for international collaboration in agro-industrial production and to this end two missions, headed by Guillermo Cid Rodríguez, a technical advisor at the farm, travelled to Brazil to visit experimental centres. The missions established a programme for cooperation and brought back samples, but the collaboration was frustrated with the military coup in Brazil 1964. Cid's wife Cora Lazo Jesús, who held a doctorate in pharmaceuticals, used plants from the farm in laboratory experiments in the Hospital of Oncology in Havana called the Centre for Scientific Investigations. According to Juan Valdés Gravalosa, secretary of MININD's Management Council, there were around 40 scientists working under Guevara's directives on the top floor of the hospital. Guevara would meet with them to discuss ideas and agree which would qualify for investigation; experiments with medicines to combat leukaemia, antibiotics and so on. Valdés once went to the Centre to carry out his fortnightly 'factory' visit, obligatory for all members of MININD's Management Council. He recalled: 'There was an experiment known as '31'. I called the boss and asked him what it was. The director told me that this involved taking post-exhumation earth in which a flower with strong medicinal qualities grows. They were secretly going round the cemeteries!'¹¹⁷ There is no independent collaboration for this claim, but it is clear that the laboratory was involved in diverse and innovative projects with medicinal and homeopathic potential and that Guevara, who had personal experience of medical research in South America in the 1950s, was linked to this work.

In addition to the botanical and technical experimentation, Ciro Redondo was used as a social experiment for the organisation of work, management techniques, incentives structures and salary scales, aspects of the BFS.¹¹⁸ The salary scale implemented at the farm applied a system of norms used in the agricultural sector adjusted for activity linked to research and development. Exceeding the norm resulted in over payment, including payment in kind. However, the bonus went to a collective fund distributed to workers according to their different levels of qualifications, of completion of the plan of work, attendance, punctuality, quality and yield of the

¹¹⁷ Gravalosa, interview.

¹¹⁸ Information from Sáenz, *Ministro*, 180-181.

harvest. The first type of award distributed from the collective fund was housing, built collectively on the farm itself, second was furniture, radios, horses, and so on. Those who lacked punctuality could not receive awards. Additionally, the communal fund could be used to finance social works, for example, cinemas and kids groups. Sáenz explained: 'This form of payment was designed to relate the worker to his productivity, to interest him in raising his qualifications and develop his collective spirit. In this way, his individual compensation was a measure of his contribution and comprehensive personal effort, including in his studies.'¹¹⁹ This salary scale experiment was taking place during the project led by the Ministry of Labour, with collaboration from Guevara and others, to formulate a new national payroll. The experience at *Ciro Redondo* was clearly significant for what it revealed about how incentives could be devised to link training and productivity to a collective attitude to work; work as a social duty.¹²⁰ Minister of Labour, Augusto Martínez Sánchez visited *Ciro Redondo* with Guevara, flying into the airstrip which the workers had built to accommodate his frequent visits there. Sáenz also accompanied Guevara, touring the farm on horse back to observe all the experiments and cultivations and discussing these, the administrative systems, and the study circles with the workers. MININD's Director of Psychology, Dr Graciela de Cueto went periodically to the farm to assess those with learning difficulties and other problems.¹²¹

In 1965 *Ciro Redondo* was transferred to the National Centre for Scientific Research (CENIC). According to Sáenz many of the workers there went on to play leading roles in the Union of Young Communists and the Cuban Communist Party. Many structures experimented with in *Ciro Redondo* were integrated into Cuban social and technological institutions; the salary scale, the system of collective material incentives in the form of housing, other durable goods, or social provisions; the increasing integration of agriculture and technology, botanical experimentation and the use of 'green' medicine.

¹¹⁹ Sáenz, *Ministro*, 181.

¹²⁰ Details in chapter 6.

¹²¹ See chapter 10 for details about Guevara's collaboration with psychologists.

NAVAL CONSTRUCTION, AUTOMATION AND ELECTRONICS

The research and development institutes discussed above relate to two of the four lines of development which Guevara proposed in 1962: metallurgy and sugar cane derivatives. The remaining sectors were electronics and naval construction. The attempt to foster progress in these areas were not institutionalised in research and development institutions; but integrated into the ministerial apparatus via an Office for Automation and Electronics, under the Vice Ministry of Technical Development and a Consolidated Enterprise (EC) for Naval Construction in the metallurgy branch of the Vice Ministry of Basic Industry. These areas of work are summarised following an examination of the final institute set up to foster machinery development within MININD.

1963 Cuban Institute for Machinery Development [ICDM]

*'The Cuban Institute for Machinery Development will concentrate its action in the development of spare parts and agricultural machinery, coordinating the latter with INRA [National Agrarian Reform Institute].'*¹²²

Guevara lamented that one of the major failures of the early trade deals with the Socialist bloc countries had been the failure to purchase a spare parts factory.¹²³ Committees for Spare Parts had emerged as ad hoc decentralised projects to tackle the post-1959 lack of spare parts and prevent production stoppages. In 1961 the Movement for Inventors and Innovators was set up and this evolved into the Campaign to Construct Your Machine in 1962.¹²⁴ The ICDM, operating by 1962 but officially inaugurated in 1963 was a further step towards institutionalising and systemising domestic solutions to problems of a lack of capital goods and spare parts. The Institute had the spare parts plan for the ministry and collaborated with the Light Mechanics branch, which had 10 ECs within it. Sáenz explained the aims of

¹²² *Orientaciones 1964*, MINAZ, 612.

¹²³ Guevara, *Bimestrales*, July 1962, 289.

¹²⁴ See chapter 8.

the ICDM: 'They tried to organise the production of spare parts; to generate ideas, to train people, with the aim of producing our own spare parts. Cuba didn't have a mechanical industry, only small workshops. They also tried to develop some machines. They gave a national impulse to the sugar harvest... This institute was the corner stone for future developments.'¹²⁵ In addition to the production of spare parts, the ICDM was to focus on constructing agricultural machinery for sugar cane and kenaf, a plant used to make fibres. Henderson, the engineer who assisted with the mechanisation of the sugar industry, was involved in the work of the ICDM, before returning to Canada.

The 1964 Annual Report defined the ICDM's responsibilities as: planning the production of spare parts for the ministry, collaborating with the General Office of the Plan of Technical Development to study development in the mechanical branch, continuing the work initiated on the development of agricultural machines for cane and kenaf, and setting up a metallurgy laboratory to tackle problems that arose in that branch.¹²⁶ In 1964 a plant was set up for spare parts manufacture, including experimenting in the production of parts for diesel motors. There was a marked increase in the production of spare parts, from 4,500 metric tons (4,770 parts) in 1963, to 5,940 (8,200 parts) in 1964, an increase of 132%, and with a planned increase to 9,800 parts in 1965.¹²⁷ Clearly there was significant progress in the principal task of the ICDM. The institute was also accredited with building a combine harvester for the sugar cane – a new prototype tested in the 1965 harvest. They had also improved domestic made machinery to cut kenaf and another machine for stripping the bark from the plant. While the institutes work was satisfactory, its principal weakness was its dependence on foreign technicians.¹²⁸

¹²⁵ Sáenz, interview, 2006.

¹²⁶ *Memoria 1964*, MININD, 116.

¹²⁷ *Memoria 1964*, MININD, 81.

¹²⁸ *Memoria 1964*, MININD, 82..

1962 Office of Automation and Electronics

*'We are entering the era of automation and electronics; we have to think of electronics as a function of socialism and the transition to communism... Electronics has become a fundamental political problem of the country.'*¹²⁹

According to Trueba: 'Automation and electronics were a passion for Che as minister of industries.'¹³⁰ Electronics was essential to the development of the productive forces and automation was the highest stage of technological development. The development of the productive forces under socialism would be measured largely by the extent to which the economy had introduced electronics and automation to production and administration.¹³¹ In 1917 Lenin had argued that electricity was a component of socialism, the highest form of social organisation and production. Since then electronics and automation had revolutionised production and therefore this technology should be integral to socialist construction. Indeed, automation itself could accelerate transition to the new society, said Guevara: 'automation is precisely the stage that marks the possibility of taking a leap, or we can say, arriving at the historical social stage to which we aspire, which is socialism. Without automation, that is, without substantially raising productivity, we will take much longer to reach that stage.'¹³²

First, however, there was a more basic and immediate need to extend the electricity supply throughout the country. This would serve an important political function, decreasing socio-economic differences, mainly between urban and rural Cuba exacerbated by the inequality of access to electricity, not just in terms of personal consumption, but also in determining where new industries could be located to provide employment opportunities. Guevara explained:

¹²⁹ Guevara, *Bimestrales*, 20 January 1962, 149.

¹³⁰ Trueba, *Aniversario*, 44.

¹³¹ See chapter 7 for projects to introduce the automation of administrative control.

¹³² Guevara, 'El papel de los estudiantes de tecnología y el desarrollo industrial del país', 11 May 1962, *Ciencia*, 120.

‘Electricity is one of the services that contributes more than any other towards the elimination of those differences, and electrification of the countryside is one of the tasks that the agricultural economy of Cuba faces in the future...Without electricity it is impossible to locate new industrial centres, and often the preferred location, from other standpoints, has been jeopardised because electrical provision was insufficient for installing factories.’¹³³

Through MININD, energy plants were bought from the Soviet Union, Czechoslovakia, East Germany and France and set up throughout the island. Trueba underlined that: ‘The importance that this action had for the economic development of the country and for the survival of the Revolution is difficult to overestimate.’¹³⁴ However, purchasing the plants from the Soviet bloc incurred enormous additional problems, as Sáenz explained: ‘the eastern socialist countries worked with 50 hertz, and Cuba worked with 60 hertz. They had to adapt the equipment that was sent to us, because we couldn’t change the whole electrical system. Those were big problems but the biggest problem was the lack of technical people.’¹³⁵

In 1963 Guevara still referred to the electricification of Cuba as ‘an enormous task’. Regions of the island, particularly the countryside, still did not have sufficient electricity provision. Many of the factories planned, as part of the overall industrialisation strategy, involved huge investments in energy production. For example the mechanised cleaning centres for the sugar cane, discussed above.

Electronics and computing

‘Che created the first school of computing and acquired the first computers...Che was the pioneer of the introduction of computing in Cuba.’¹³⁶

¹³³ Guevara, ‘Discurso en el acto de clausura del Forum de la Energia Electrica, 23 November 1963, in *Escritos*, Vol 7, 135.

¹³⁴ Trueba, *Aniversario*, 33-4

¹³⁵ Sáenz, interview, 2005.

¹³⁶ Oscar Fernández Mel, interview, 10 January 2006.

Guevara wanted to import computer components and assemble the machines in Cuba. This would reduce the cost of the technology transfer and serve to train up electrical engineers until they were capable of manufacturing computers domestically. To be truly endogenous, the electronics industry would have to develop as a corollary of the mechanical industry based on the extraction and exploitation of the islands metal reserves. Given the underdevelopment of Cuba's metallurgy and mechanics industries and absence of an electronics industry and the lack of computers in Cuba, Guevara's concept must have appeared as a pipe dream. He answered this criticism directly, stating that with investment, planning and training there were no barriers to entry in the international electronics field:

'Everything indicates that this science will constitute some kind of measure of development; whoever dominates it will be a vanguard country. We are going to make an effort towards this with revolutionary audacity and incorporate ourselves into the group of countries that adapt themselves quickest to the technological upheavals that are occurring.'¹³⁷

Guevara did not just articulate this desire but he directed his compañeros to prepare for these developments. Eugenio Basott, MININD's Director of General Services, recalled that a few days before Guevara left Cuba:

'I was in the foyer of the Ministry and there was an IBM machine, the old type that used cards. Che came by and we started to talk and he said to me: "What do you think about making one of these machines?" I said: "OK *comandante* we will start working on that." He was really enthusiastic, and I was very enthusiastic. But that never materialised, because he left.'¹³⁸

¹³⁷ Guevara, *Tareas*, 108.

¹³⁸ Eugenio Busott, interview, 9 December 2004.

It is difficult to speculate the degree of success the project of developing an electronics industry would have enjoyed if Guevara had remained in Cuba as minister. Given the slow progress in the metallurgy and mechanics industries, it is clear that a computing sector based on domestic manufacture was a long way off and remains so today. On the other hand, computers are now abundant in Cuba and fully integrated into the education system with a computer in every classroom. This will facilitate the training of computer engineers. There are also four Cuban computer networks with international internet connectivity: CENIAI (Centre for Automated Interchange of Sciences), Tinored (in the Youth Club computer centres), CIGBnet (Centre of Genetic Engineering and Biotechnology) and InfoMed (National System of Health Information of the Ministry of Health). As Guevara intended, electronics and computing have been applied to production, and science and technology research.

Automation

*'Today and tomorrow cadres must be prepared so they are ready in the future to take up the next great technological task: the automation of an ever-increasing part of total production, the liberation of man by means of the machine.'*¹³⁹

For Guevara automation facilitated a technologically sophisticated and centralised organisation of production, which freed workers from manual labour to concentrate on the political priorities of the planned economy. He argued that technological advances impose centralisation over the productive forces, citing as an example US electrical generators, which generate one million kilowatts each, more power from each plant than the installed capacity throughout Cuba, with a handful of operators.¹⁴⁰ This had important political implications for socialism and communism. Guevara explained: 'That means that in the great modern, centralised and automated industries, man's action should be carried on outside of production. In the future man

¹³⁹ Guevara, *Bimestrales*, January 1962, 149.

¹⁴⁰ Guevara 'Discurso en el acto de graduación de 296 administradores del MININD', 21 December 1962, *Ciencia*, 91.

will express his desires through political institutions which will be created, and which will determine the types of production which are necessary in the country.’¹⁴¹ Automation would permit political control over the economy.

The Office of Automation and Electronics was responsible for the School of Automation, set up for middle and then higher level technicians to study automated control. Sáenz described Guevara’s instructions to the Office as: to study, repair and maintain all the means of industrial control in the country, to oversee the training of technical cadre who would carry out future studies on the automation of the industrial sectors, and to study the feasibility of installing an electronic components factory. They were also to direct the projects of the EC of Electrical Equipment. In 1964 and 1965, they had also been asked for a feasibility study of automation in the sugar industry, with pneumatic and hydraulic controls.¹⁴²

Ambitious projects were underway. The Annual Report for 1964 mentioned a project related to the automation of the Maritime Terminal of MINAZ in Matanzas, and the installation of a system of control of *tachos* (the centrifuge which separates sugar crystals from molasses) and evaporators. The Report concluded negatively that the Office suffered from a: ‘lack of definition of objectives, lack of technical cadres and internal organisational deficiencies’¹⁴³ Trueba recalled that: ‘there was the negotiation and construction of a plant to assemble televisions in collaboration with Poland. It gave few results.’¹⁴⁴ Sáenz’s listed their tasks in late 1964 as: ‘the development of computing starting from a machine and then the entire field of automation in the administrative sphere, the components and, with less urgency, a plan for the automation of industries’, but concluded that the Office had achieved nothing and was incapable of organising the resources it had.’¹⁴⁵ The tasks set for Office were often changed substantially. It is not clear, however, whether a lack of clarity of the institution’s purpose explains this inconsistency, or vice versa. Despite

¹⁴¹ Guevara, *Graduación*, 92

¹⁴² *Tareas 1963*, MINAZ, 589-590 & *Orientaciones 1963*, MINAZ, 610 & Sáenz, *Ministro*, 163-4.

¹⁴³ *Memoria 1964*, MININD, 80.

¹⁴⁴ Trueba, *Aniversario*, 44.

¹⁴⁵ ‘Informe del viceministerio para del desarrollo técnico’, 24 September 1964, MINAZ, 143.

his ambitious approach to electronics and automation, Guevara warned against idealist goals:

‘We also have to struggle a little against the idea that automation, that is, the era of electronics, is tomorrow, or within our hands. It is an aspiration; an aspiration which is a precondition for the development of a new society. But for this there has to be preparation...and this will not be achieved in one day, not even in the course of a plan’.¹⁴⁶

A major aspect of that preparation was in training electrical engineers, and developing research experience in the field of electronics, cybernetics, instrumentation and computing. This was a precondition to create the material base for electronics and automation and even the technical capacity to operate imported material.¹⁴⁷ The School of Automation was, effectively, a theoretical school, lacking the technology for the applied aspect. It counted on Czechoslovakian engineers among its teachers.¹⁴⁸ The specialities it taught were instrumentation and automation. In December 1964, 69 worker-students graduated on the instrumentation course of as mechanics of measurement and control. A further 39 students were studying instrumentation techniques and 28 were students of automation.¹⁴⁹ As Sáenz pointed out, the Office of Electronics and Automation was a further demonstration of how Guevara established apparatus to find immediate solutions to concrete problems at the same time as laying the groundwork for future studies and work.¹⁵⁰ Ultimately, however, during Guevara’s time in Cuba the Office had few tangible results.

Naval Construction

‘The naval industry offers prospects of enormous importance to Cuba, but it is not just one industrial branch. Rather it is constituted by a complex of manufacturing: metallurgy, motors of various types, cables,

¹⁴⁶ Guevara, *Estudiantes*, 131-132.

¹⁴⁷ Sáenz, *Aniversario*, 1963-4.

¹⁴⁸ Sáenz, interview, 2006.

¹⁴⁹ *Memoria 1964*, MININD, 75.

¹⁵⁰ Sáenz, *Ministro*, 164.

*electrical equipment and electronics, carpentry, etcetera. Cuba will need to transport more than eight million tonnes [of sugar] in 1965, when this nascent industry begins... we will need at least 80 ships for Cuba alone. Other important branches could benefit from naval construction such as the coastal trade, which is the cheapest form of internal transport, and the construction of a fishing fleet.'*¹⁵¹

Guevara was clear about the complexity of naval construction. It served as a kind of litmus test of progress in other industries; metallurgy, electronics and mechanics. As a trade dependent country, it would save Cuba millions of pesos on transport costs every year. The domestic construction of a fishing fleet would facilitate the expansion of the fishing industry, providing substitutes for costly food imports, and benefit underdeveloped coastal regions. Pre-empting objections to the huge investments required, Guevara asserted that: 'in terms of hard currency, a ship recoups a value of 2.5 million pesos in five trips to Europe, with the average value of \$500,000 per round trip which constitutes a succulent saving for a country such as ours, maritime exporter par excellence.'¹⁵²

Trueba stated that investments in the naval construction industry had begun in the 1950s, but that after the Revolution: 'it could not get the internal consensus necessary for its development.'¹⁵³ The Consolidated Enterprise (EC) of Naval Construction was set up 1962 in the Metallurgy Branch of the Vice Ministry of Basic Industry. The EC achieved little in concrete terms and Guevara assessed its management negatively in June 1964.¹⁵⁴ That year it was the EC which fell shortest from planned production; 61%, a shortfall valued at over 9,000 pesos and accounting for 25% of the total shortfall of the Vice Ministry of Basic Industry.¹⁵⁵ Although Cuba never managed to build major transport ships, there was progress in construction of fishing boats from 1962. This included iron and cement boats, and

¹⁵¹ Guevara, *Tareas*, 106-107.

¹⁵² Guevara, *Tareas*, 106-7.

¹⁵³ Trueba, *Aniversario*, 35.

¹⁵⁴ Guevara, 'Informe de la Empresa Consolidada de Construccion Naval', MINAZ, 109-110. Also Gravalosa, interview.

¹⁵⁵ *Memoria 1964*, MININD, 8.

Cubans trained in naval engineering in the Socialist bloc were able to assimilate the technology and the management of merchant ships acquired by Cuba over the years.¹⁵⁶

CONCLUSION

*'We are inaugurating an epoch in which scientific knowledge is, and will increasingly be, the main force that determines our rhythm of development and our capacity to 'jump stages' in the construction of socialism.'*¹⁵⁷

Guevara's promotion of science and technology within MININD was part of his theoretical understanding that communism should arise out of the highest stage of development of the productive forces. The greater the level of automation and centralisation imposed by the production process, the greater the potential for conscious and political control of the economy, as market forces are replaced by planning in determining production and consumption. More concretely, however, the research and development institutes set up in MININD worked towards immediate goals: to find substitutes for costly imports; increase the value added to raw material exports, particularly sugar and nickel; create a mechanical industry to exploit Cuba's metallurgy reserves, produce spare parts and to create the foundations for the production of capital goods. Parallel to these projects, was the need to create a training infrastructure, reduce inequality by extending electrical provision and hence employment opportunities, mechanise manual labour and improve productivity.

The development strategies pursued by the research and development apparatus set up within MININD illustrate Guevara's insight into important international economic and technological developments. At the same time these were based on Cuba's

¹⁵⁶ Sáenz, *Ciencia*, 13.

¹⁵⁷ Guevara, 'Discurso en el acto de graduación de 296 administradores del MININD', 21 December 1962, in *Ciencia*, 148.

concrete conditions; rich mineral and metal deposits; the predominance of the sugar industry and agriculture in general; and recent international advances in the chemical industry, computing and automation. Domestic naval construction was premised on the development of many other industries, but it was motivated by Cuba's foreign trade dependency. Reality imposed many obstacles: a lack of specialists and training facilities; deficient financial and material resources for investment; limited vision and appreciation of the aims of the institutes in general and within the government; isolation from the advanced capitalist world which impeded technology transfers; and the relative backwardness of Soviet bloc capital goods. Guevara's desire to catch up with the most advanced world developments appeared idealist against the backdrop of underdevelopment and blockade. Reality put up many barriers to entry and limited the progress of these institutes and their economic impact. This is particularly the case with the development of the chemical industry, sugar cane derivatives and naval construction. On the other hand, as the chapter has demonstrated, there were tangible results achieved, particularly in metallurgy, machine production and the mechanisation of the sugar industry.

Borrego explained that when Guevara left Cuba the research and development institutes within MININD suffered neglect as the ministry was split up and much of the apparatus which Guevara developed as part of the BFS was removed by the new minister Joel Domenech. Borrego said: 'This lasted about two years. It was a mistake on our part, but luckily we realised that quickly and refocused on them.'¹⁵⁸ Today, institutes covering all the functions of those set up by Guevara between 1961 and 1963 operate in Cuba. Some of them are the same institutes, but with a new title, the ICIDCA has remained in MINAZ. It is arguable that, although the achievements in productive terms was limited during MININD's existence, Guevara's real achievement was to introduce a methodology for applying science and technology to production, to force that agenda onto the national development strategy and to initiate the institutionalisation of the necessary training and research infrastructure.

¹⁵⁸ Borrego, interview, 23 November 2005.

Jorge Ruiz testified to how Guevara's vision was gradually realised. He had worked with Guevara on attempts to apply computer processing to optimise production, including through the introduction of the critical path method for managing projects with sequential and parallel tasks. When MININD split up, Ruiz became Vice Minister of the Ministry of Minerals, Fuel and Metallurgy from where he was able to apply these methods, first tentatively investigated in MININD. Ruiz pointed to the substantial economic benefits: 'For example, through my investigation into the mining process at Moa we saved millions of dollars with an operational analysis I was doing on that old computer...'¹⁵⁹ Ruiz was clear that although such results were not attained whilst Guevara was minister of industries, they were the direct legacy of a methodology which he promoted. Arguably, Guevara's legacy is witnessed today in the substantial advances in Cuba's biotechnology industry and the ecology sector, which have a link, albeit a tenuous one, to his experimentation in the ICIT, Ciro Redondo and the chemical institute.

¹⁵⁹ Jorge Ruiz Ferrar, interview, 5 April 2006.

CHAPTER 10

Consciousness and Psychology

A worker goes to see the Secretary of the Party to say that he wants to become a militant.

Party secretary: *Well, to be a party member you have to be an example at work. That means that you have to work 12, 18 or 20 hours a day.*

Worker: *So many hours a day – he asks startled.*

Secretary: *Yes, and that includes Saturdays and Sundays.*

Worker: *As well!?* – he says even more alarmed.

Secretary: *Yes, and no vacations.*

Worker: *Neither!?*

Secretary: *Neither. What's more you have to be faithful in your married life, no going around with women.*

Worker: *Not even one exception?*

Secretary: *None. Also, you have to stop having a little drink after work.*

Worker: *Not even a little drink to celebrate something?* – he asks about to go crazy.

Secretary: *No. And most important thing; you have to be prepared to give your life for the country.*

Worker: *Now that is no problem.*

Secretary: *Really, why not?*

Worker: *Well, after the lousy life I am going to lead...!*¹

For Guevara consciousness meant 'socialist' or collective awareness, a commitment to the social and economic justice aims of the Revolution. The Spanish word *conciencia* is translated into English as both consciousness and conscience. Here the

¹ Joke told by Guevara, cited by Tirso W Sáenz, *El Che Ministro: testimonio de un colaborador*, Ciencias Sociales, La Habana, 2005, 245-6.

word 'consciousness' is used, but it should be understood in the sense of social conscience transcending individual interest. For Guevara international solidarity was the highest form of consciousness because it was apparently disinterested assistance to people on the basis of shared humanity. Psychology was a scientific instrument to measure the state of consciousness at the level of the individual and assess how changes in society were reflected within the mind and in value systems. The relationship between consciousness and production was symbiotic; raising consciousness increased workers' commitment to production and economic management, increasing productivity and efficiency, while economic facts and relationships of production impact upon consciousness, or the workers psychological state. Incentive systems were the key to raising productivity. Guevara insisted on changing the names of functions within his economic management system, the Budgetary Finance System (BFS). So while the BFS borrowed from US corporations, it adopted titles which reflected the conception of socialist Cuba as one big factory. Fidel Castro explained that: 'Che was opposed to using capitalist terms when analysing socialism'.² Guevara's deputy Orlando Borrego explained: 'if you change the social system you also have to change the mentality. So "profit" becomes "record of results"'.³ The transference of products from one enterprise to another was called 'delivery of products' rather than commerce or sales, and 'market research' became the 'study of products'. This was part of the effort to turn surplus value into surplus product. Under socialism, profit belongs to society, products are exchanged between enterprises in one big factory and production is determined by social needs, not by commercial imperatives.

The first section of this chapter deals with consciousness, starting with an examination of the origin of Guevara's preoccupation with human beings in the development process. It then describes the incentive systems adopted, focussing on moral incentives and examining the origins, purpose and achievements of both socialist emulation and voluntary labour, as the key tenets of incentives policy. Next

² Fidel Castro, 'Speech by Fidel Castro on October 8, 1987' in David Deutschmann (ed) *Che: A Memoir by Fidel Castro*, Melbourne: Ocean Press, 1994, 153.

³ Orlando Borrego Díaz, Seminar. *International Youth Seminar: With Che's Ideas*, La Habana, 23 November 2002.

there is a discussion about the Rehabilitation Centre at Guanahacabibes, a form of moral disincentive and of San Miguel de los Baños, a rest and recuperation centre which demonstrated the concern for workers' wellbeing. The second section of the chapter examines Guevara's belief that psychology was a legitimate and useful tool under socialism. It illustrates how psychology was applied and the obstacles which this apparatus faced, expressed as a general scepticism of its scientific value. The policies formulated within MININD, to raise consciousness and apply psychology, began in an experimental way as part of a search for solutions to the problems of socialist transition. The chapter illustrates how the early tentative policies were gradually institutionalised to become vital elements of the BFS.

CONSCIOUSNESS

Guevara's emphasis on the importance of developing a collective consciousness during the process of socialist construction has been attributed to many influences: early interest in philosophy, reading Marx's philosophical works, observations in the Soviet Union, the experience of mass participative revolutionary struggle in Cuba, Latin American political traditions, the critique of US and western-European Marxists of existing socialism.

Maria del Carman Ariet García, scientific co-ordinator at the Che Guevara Study Centre in Havana, claimed that the theme of man's centrality in social development had concerned Guevara since his adolescence. This claim is based on her analysis of Guevara's bibliographical notebooks, kept since the age of 17, in which he listed and commented on the books he read. He then indexed these notes. Ariet stated that: 'the *index* allows, beyond all speculation, a measurement of the breadth of his knowledge and the paths down which his intellectual interests took him.'⁴ Specifically, she added, it demonstrated: 'the importance that he gave to philosophy, as a kind of

⁴ Maria del Carmen Ariet García, *El Pensamiento Político de Ernesto Che Guevara*. Mexico: Ocean Press, 2003, 30-1. See also Ariet, *Una Aproximación a la Periodización de la Vida y Obra de Ernesto Che Guevara*, Havana: Ocean Press, no date.

central axis articulated in the later development of his thoughts... This being a stage of searching and evolution it is not possible to make absolute statements, but if something is valid from a general reading of the notebooks, it is his permanent insistence on the theme of man and his place and development in the world and society.’⁵ Ariet claimed that Guevara first embraced Marxism through his interest in philosophy.⁶ According to Borrego, Guevara had read the Argentinian philosopher José Ingenieros, founder of the *Revista de Filosofía* in Argentina and: ‘all the American philosophers. He read the classical European philosophy, including Kant and Hegel.’⁷ Aged 25 years, Guevara referred to himself as: ‘the eclectic dissector of doctrines and psychoanalyst of dogmas’.⁸ The bibliographical index is an early indication of a systematic approach to knowledge which characterised Guevara’s work in the Cuban government.

According to Borrego, Guevara’s emphasis on consciousness originated from his reading of the ‘young Marx’ and observations in the Soviet bloc.⁹ Marx characterised the psychological or philosophical manifestation of capitalist social-relations as *alienation* and *antagonism*; the result of the commodification of labour power and the operation of the law of value. For Guevara, the challenge was to replace the individuals’ alienation from the productive process, and the antagonism generated by class relations, with integration and solidarity, developing a collective attitude to production and the concept of work as a social duty. In the Soviet bloc he observed that the operation of the law of value and the neglect of political education were obstacles to the transformation of consciousness. Capitalist competition created the drive to increase productivity through technological innovations and increasing exploitation. Alienation and antagonism increase with productivity. Under socialism, the development of the productive forces could be less accelerated. However, it should be accompanied by a growth of consciousness. In transition to socialism

⁵ Ariet, *Político*, 36.

⁶ Ariet, interview, 20 January 2005.

⁷ Borrego, interview, 30 November 2004. Ingenieros (1877-1925) wrote *Principios de Psicología Biologica* analysing the development, evolution and social context of mental functions.

⁸ Ernesto ‘Che’ Guevara, *The Motorcycles Diaries: a journey around South America*, Fourth Estate, 1996, 152.

⁹ Borrego, interview, 24 January 2005.

market forces are replaced by planning, workers take conscious control of production instead of being enslaved by the imperatives of accumulation, thus reversing their alienation and antagonism. For Guevara it was vital that efforts to change consciousness be incorporated in socialist transition at the earliest stage. Borrego explained: 'The USSR and other socialist countries said that first you had to develop the productive forces to reach a determined standard of living, emphasising the material aspect, and later you could be concerned with consciousness. Che said communism would be reached much quicker by raising consciousness simultaneously with the productive forces.'¹⁰

Marxists outside the Soviet bloc influenced Guevara's conception of socialism as a function of consciousness.¹¹ Unlike these Marxists, however, Guevara was in the position to formulate policies to concretise these ideas. It is far easier to criticise existing socialism for underestimating the importance of consciousness and education than to actually formulate alternative policies which can be implemented and institutionalised. By the time the Ministry of Industries (MININD) was founded in February 1961, Guevara had developed his critique of Soviet socialism and was already searching for a solution to the problem; what mechanism or policy can be formulated to raise the level of consciousness and commitment to socialist construction?

For Guevara, the development of consciousness was dialectical; it would increase with experience and with material changes in the standard of living and in the relations of production. Hence his emphasis on political education and skills training, both to accelerate changes in the productive sphere and in the individuals' capacity to understand material changes from a political perspective. July 1962 Guevara expressed this dialectical understanding of changing consciousness:

¹⁰ Borrego, interview, 24 January 2005.

¹¹ Particularly Paul Sweezy, Leo Huberman and Paul Baran from the US. Guevara told MININD directors he planned to circulate an article by Sweezy about how the growing domination of the law of value in Yugoslavia signalled its return to capitalism. 'Reuniones Bimestrales', 5 December 1964, in Ministerio de Azúcar. *El Che en la Revolución Cubana: Ministerio de Industrias*, tomo VI, La Habana: MINAZ, 1966, 568.

‘Four or five years ago, how many of you said that the Communist Party was shameless and that socialism was absurd? Lots of people said this or thought it... But when the socialist stage of development arrived, people began to change their way of thinking. Are they opportunists? Of course not... I came from the bourgeois class, anticommunist and all that and I came to understand a set of truths in the process of struggle. People have changed, they have a new mentality... this is a dialectical process where everything is changing.’¹²

The Revolution, Guevara stated, was in the process of destroying the bourgeois state apparatus but it was also necessary to destroy the ideas associated with that apparatus in people’s consciousness: ‘Compañeros, I beg you...read [Lenin’s] *The State and Revolution*. Go back to the chapters where he talks about the transition of the old society to the new society and all the remains in this new society that is being constructed.’¹³ This dialectical understanding of the relationship between consciousness and material reality explains Guevara’s acceptance of the need to use a combination of material and moral incentives, fazing out material incentives until they are redundant and can be removed without jeopardising production. The theoretical analysis has been explored in chapter 5 on the Great Debate. This chapter examines the actual mechanisms built into the BFS to raise consciousness.

INCENTIVE SYSTEMS

Incentives are the key to increase productivity and efficiency in the context of underdevelopment and scarcity and in the transition to socialism and communism. Guevara believed that it was necessary to use a combination of material and moral incentives, giving increasing weight to the latter at every stage until material incentives are no longer necessary. The different forms of incentive are summarised below:

¹² Guevara, *Bimestrales*, 14 July 1962, 268.

¹³ Guevara, *Bimestrales*, July 1962, 269.

Material incentives

1. Wage incentives: to improve qualification and skills level.¹⁴
2. Individual awards for production over the norm: cash bonus or payment in kind. Guevara least approved this form of incentive, which he believed fostered individualism, hindering the development of collective consciousness and the concept of Cuba as one big factory. Such incentives resorted to the same motivating device as capitalism – personal gain. Individual material incentives were largely phased out by the late 1960s.
3. Collective awards for production over the norm: usually payment in kind. Collective material incentives did less to encourage individualism, as they forged a team spirit and the impulse to work for the common benefit, albeit a select group and a material motivation. However, Guevara warned of the potential for corruption when work collectives prioritised their own material interests over those of society. As example he cited technicians in the Soviet Union who battled to lower the plan of production because:

‘...this means there is less danger of not completing the plan and it is easier to surpass it, which means more awards. So a contradiction is being created between the state and the enterprise which is not socialist; a contradiction that commits an outrage against the development of consciousness... you see it much more in Yugoslavia, but you also see symptoms in the Soviet Union in my view. The leader of a Soviet enterprise is a production technician and he deceives the central apparatus.’¹⁵

4. Material disincentives: Individual’s salaries were deducted due to the failure to meet the production norms. Guevara explained: ‘We have given this a slightly

¹⁴ See chapter 6.

¹⁵ Guevara, *Bimestrales*, 21 December 1963, 425.

ridiculous name “material disincentive” but it does make sense. It means we recognise a material incentive in a negative way.’¹⁶ Guevara also applied strict disincentives to members of the Management Council as a form of compelling discipline. Anyone late for three meetings would be docked three days pay, as would anyone failing to carry out obligatory factory visits.

With serious shortages caused by the US trade blockade, productivity decline and the budget deficit, the reliance on material incentives required monetary rewards and consumer goods that were scarce. As Minister of Labour from 1967, Jorge Risquet highlighted the problem: ‘How can Cuba emphasize material incentives at a time of serious shortages and economic sacrifices when 90 miles away such goals can be more easily fulfilled? We simply would be creating conditions for the mass migration of Cubans to the United States.’¹⁷ Moral incentives, therefore, had economic as well as ideological benefits.

Moral incentives

Moral incentives were institutionalised in MININD through Socialist Emulation and Voluntary Labour. Both are examined below. San Miguel de los Baños was a form of moral award, a recuperation hotel for worn out workers, while Guanahacabibes, a rehabilitation centre, took the form of a moral disincentive. These are also examined below.

¹⁶ Guevara, *Bimestrales*, December 1963, 424.

¹⁷ Jorge Risquet, cited by Bertram Silverman, *Man and Socialism in Cuba: The Great Debate*. New York: Atheneum, 1971, 19.

SOCIALIST EMULATION

Socialist emulation is fraternal competition between workers, either as individuals or collectives, in the productive sector. It was the principal method of institutionalising moral incentives. Cuban economist Carlos Tablada explained that:

‘In developing a model of economic management, Che viewed socialist emulation as a fundamental element in the structure of the entire system. As against the competition generated by the law of value, Che counterposed a fraternal competition based on socialist comradeship that favoured emulation. The Cuban Revolution was characterised from the outset by broad mass participation... Che worked to establish the same approach in the economic sphere, in the process of laying the material and technical base for socialism.’¹⁸

There were several mechanisms to promote participation in emulation. One collective moral incentive was what Roberto Bernardo called the ‘play motive’: ‘Festive-like voluntary work projects in agriculture.’¹⁹ Emulation assemblies were convened in all the work centres to elect the most productive and dedicated workers into the ‘advance guard movement’. Prizes were presented to workers at official and public ceremonies for extraordinary effort or productivity. Workers were awarded with symbolic flags and plaques at ceremonies which usually took place on historic dates commemorating Cuba’s 500-year struggle against colonialism and imperialism. Not only did this connect increased productivity with consciousness, it also linked the forging of socialist attitudes with national pride. Bernardo observed that: ‘Competition was to be fraternal marked by no secrecy, a spirit of camaraderie about the whole process and willingness to share one’s superior method. Fraternal competition takes place among individuals and groups, for example, among brigades,

¹⁸ Carlos Tablada, *Che Guevara: Economics and Politics in the Transition to Socialism*, 2nd ed, New York: Pathfinder, 1990, 199.

¹⁹ Robert M Bernardo, *The Theory of Moral Incentives in Cuba*, Alabama: University of Alabama Press, 1971, 58.

sections, factories, regions and the like. In addition there are *ad hoc* and task-oriented emulations...²⁰

Initially, workers tended to receive hybrid prizes, part material and part moral. Material awards sometimes included cash, but mostly goods in kind, such as refrigerators, housing, vacations and travel to Eastern Europe. Later, material incentives were phased out in favour of moral incentives under socialist emulation. According to Bernardo, by late 1965 and early 1966 cash prizes were abolished.²¹

In 1963 a National Emulation Committee was set up with provincial, regional and local emulation commissions presided over by the Ministry of Labour. Every Consolidated Enterprise (EC) in MININD had an emulation office and implementation of indices measuring worker performance was monitored by the trade unions. For example, 100 points were awarded for completion of the plan, with an extra three points for every percent by which it was surpassed and a deduction of 6 points for every percent by which it was not met.²² Committees for the Struggle Against Bureaucracy were set up to monitor the administration of socialist emulation, setting rules and norms. Cuban economist Carlos Tablada wrote that Guevara: 'was interested not only in the system's concepts and procedures, but also in how well they were grasped by the workers.'²³ An examination of MININD's bimonthly meeting transcripts confirms this.

Emulation was a national policy before voluntary labour was institutionalised in MININD. Already by March 1962 Guevara was complaining that: 'we have let emulation fall by the wayside... Emulation has to be the base that is constantly moving the masses and we should have people who are constantly thinking of a way to stimulate it.'²⁴ A *compañero* in the meeting complained that the National Emulation pamphlet had an extraordinarily complex system of scoring which put off

²⁰ Bernardo, *Incentives*, 57.

²¹ For details see Bernardo *Incentives*.

²² Bernardo *Incentives*, 60.

²³ Tablada, *Transition*, 199.

²⁴ Guevara, *Bimestrales*, 10 March 1962, 177.

the workers.²⁵ This pamphlet, Guevara revealed was the result of six months work and consultations, so MININD directors should use but adapt it. He cited an Argentinian phrase:

“Do things badly, but get them done.” Last year we did a very bad emulation on sugar, but it was emulation. This year we are waiting; commissions of the Central Planning Board [JUCEPLAN], and a commission of the CTC [Cuban Workers Confederation], commission of the ORI [Integrated Revolutionary Organisations] and quite an extraordinary technical super-study, and we continue going round in circles. All of this was ready in November, and we have waited three months without doing anything.²⁶

Directors should go ahead and get experiences to improve upon next time, Guevara said, criticising himself for obeying the authority of JUCEPLAN and accepting their bureaucratic proposal. A year later emulation award ceremonies had been taking place monthly in MININD and Guevara said the ultimate award would go to the worker chosen to sit with Fidel for the May Day celebration.²⁷ By July 1964, MININD directors were complaining about the quantity of emulation goals set by distinct institutions for competition within and between ministries. Manuel Marzoa Malvezado, director of the EC of Basic Chemicals added that: ‘all of them have to be made real in the factories... for emulation to be alive and understood it should be as simple as possible so that the worker can make it their own and it needs to be one only and not many which confuse them and don’t allow the worker to analyse emulation.’²⁸ Others directors added similar complaints. Guevara insisted that achieving extra points or reaching production goals should not be the main aim of emulation. The productive side was important, he said, but: ‘the real importance of

²⁵ Companero, *Bimestrales*, March 1962, 234.

²⁶ Guevara, *Bimestrales*, March 1962, 234.

²⁷ Guevara, *Bimestrales*, 9 March 1963, 354. Even proponents of the Auto Financing System of economic management, with its emphasis on material incentives acknowledged that ‘workers assign great importance’ to public recognition, ‘especially when the award is to join the prime minister, comrade Fidel Castro, and other leaders of the revolutionary government on the presidential rostrum during parades and mass gatherings.’ Joaquin Infante in Silverman, *Socialism*, 168.

²⁸ Manuel Marzoa, *Bimestrales*, 11 July 1964, 495-6.

emulation is educational, because if it doesn't reach the masses it is for people who already have political education, like the directors'.²⁹ He assured his colleagues that through discussion with Minister of Labour, Augusto Martínez Sánchez and with the CTC these problems would be resolved so that the masses could understand the indices used to measure performance.³⁰

Guevara claimed that people were most inspired to emulation by the example of workers like Reinaldo Castro, who became famous through emulation in the sugar cane harvest.³¹ He said: 'These types of people are, let's say, the highest expression of work and people aspire to be forerunners like Reinaldo Castro and other vanguard workers.'³² An entire movement was built around sugar harvest emulations. Jorge Risquet, a military commander and member of ORI in Oriente at this time explained:

'We created the Millionaires Movement in which a *machetero* had to cut a million *arrobas*, each *arroba* has 11 kilograms. In the first year we had 11 brigades with 48 men in each. Organised into brigades, the work became collective for the first time... Che asked me to implement this new style of organisation in Oriente. There was a little resistance because the previous method of individual production had lasted for centuries. The task of organising with emulation was arduous, but Che praised this movement.'³³

Calling poor sugar workers millionaires had a psychological impact, elevating the importance of productive capacity over financial wealth. Emulation was a means of encouraging Cubans to work harder, either in their day job, or voluntary labour

²⁹ Guevara, *Bimestrales*, July 1964, 498.

³⁰ Guevara, *Bimestrales*, July 1964, 499-500.

³¹ Born in Oriente 1941, Reinaldo Castro, became famous in 1962 for cutting 1,000 *arrobas* a day (11 metric tonnes) by hand in nationwide emulations. In 1963 he cut 2,308 *arrobas* in eight hours (leaving piles in the field). He recalled that: 'Che was there. He spent the whole afternoon observing me cut cane. He looked at me as if he was calculating, because he already had the combine harvester in his mind.' In 1964 Reinaldo Castro was named National Hero of Work. Reinaldo, who was illiterate before the Revolution, graduated with a social science degree in 1977. He joined the Cuban Council of State and the Central Committee of the Cuban Communist Party, among other important positions. Gabino Mangüela Díaz 'Los Tiempos de Reinaldo' in *Trabajadores*, 2 January 2006.

³² Guevara, *Bimestrales*, July 1964, 498.

³³ Risquet, interview, 8 February 2005.

agricultural projects. The incentive to compete was moral, with some material awards in the first half of the 1960s. As voluntary labour was institutionalised, emulation served to consolidate the moral incentive to unpaid work, linking consciousness to production through the use of decommodified labour power. This was an experimental process, in which Guevara relied on learning by doing and maintaining constant vigilance against bureaucratisation.

VOLUNTARY LABOUR

In August 1959 in Yugoslavia, Guevara had seen voluntary labour brigades formed of students being paid to build a road. Omar Fernández Cañizares, his deputy on the 'good will' mission recalled: 'Che said this was impressive, it united them and anyone could do it. The problem was that we didn't have money in the National Bank to pay for voluntary labour. He said that if the Cuban youth accepted it without payment it would be a triumph.'³⁴ Guevara consulted the Association of Rebel Youth – predecessor of the Union of Young Communists (UJC) – suggesting that it be applied in Cuba, not just for building roads, but also hospitals and neighbourhood housing. Consequently, voluntary labour took off in Cuba; first, in construction projects, then the agricultural sector and by 1963 in industrial production.

Voluntary labour was decommodified labour, undermining the operation of the law of value. Dedicating labour power, without financial compulsion, to different economic sectors helped steel the concept of work as a social duty and made workers conscious of problems and progress in national production. It broke traditional barriers between workers of different sectors and skill levels, particularly between manual and administrative work and forged the concept of Cuba as one big factory under socialism. It was a mechanism for integrating the mass of workers into the revolutionary transformation of social-relations and for broadening the concept of vanguard beyond those who had fought to overthrow Batista. The key points for understanding the importance which Guevara gave to voluntary labour appear below.

³⁴ Omar Fernández Cañizares, interview, 2 March 2006.

Origins and institutionalisation of voluntary labour

Guerrilla warfare by its nature is voluntary and unpaid. But Guevara demanded more than just combat from his troops, who built workshops, schools, medical centres and farms, thus introducing the concept of work as a social duty. In his examination of Rebel Army education 1959-63, Fred Judson said: 'The experience of Guevara in the Sierra Maestra was a precedent'.³⁵ After 1959, Guevara returned to the Sierra Maestra with his Rebel Army escorts to help build a school in Caney de la Mercedes.³⁶ Other forms of voluntary mass participation were institutionalised through the people's militias set up nationally in 1959, and the literacy campaign of 1961. Medical graduates dedicated two to three years to work in rural Cuba and scholarship students dedicated vacations to agricultural work. Guevara celebrated these developments:

'This is a form of education that improves youth cadre, that prepares them for communism: the form of education in which work loses the category of obsession that it has in the capitalist world and becomes a social duty, carried out with joy, carried out with revolutionary songs, in the most fraternal camaraderie, by means of invigorating and uplifting human contact.'³⁷

By 1961, a significant reallocation of Cuban labour from the countryside to the cities had taken place, resulting in an unprecedented shortage of agricultural labour. However, the National Production Conference in August 1961 initiated a development strategy based on accumulation in the agricultural sector. Bertram Silverman explained that: 'Reversing rural-urban migration through a program of resettlement made little sense because economic plans called for a technological

³⁵ Judson adds that in the Second Front controlled by Raul Castro's guerrilla's column from March 1958, 'social organization and civil administration were expanded much further.' Fred C Judson, *Cuba and the Revolutionary Myth: The Political Education of the Cuban Rebel Army, 1953-1963*, Colorado: Westview Press, 1984, 141.

³⁶ Ángel Arcos Bergnes, interview, 30 March 2006.

³⁷ Guevara, 'Qué debe ser un joven comunista', 20 October 1962, in Guevara, *Obras 1957-1967*, tomo 2, La Habana: Casa de Las Americas, 1970, 165.

revolution in agriculture that would shortly reduce agricultural labor requirements.³⁸ The solution lay in voluntary labour, which allowed the reallocation of labour to agriculture on a seasonal basis.

In 1960, as head of the Department of Industrialisation and President of the National Bank of Cuba, Guevara helped construct a nursery in Las Yaguas, a slum area in Havana where members of the Department had carried out the literacy campaign. He also cut sugar cane.³⁹ However, the use of voluntary labour in industrial production came later with the initiative of Ángel Arcos Bergnes, head of the Office of Personnel and director of both the light mechanics branch and the textile branch in MININD.

Arcos explained that this began in 1963 when the plan for tobacco exports was unfulfilled because the factory making cigar boxes was behind. At Arcos' suggestion the factory workers volunteered to add work shifts in the week and work on Sundays to catch up with the plan. They were joined by volunteers from throughout the branch. On the Sunday Guevara joined in, which further enthused the workers. Given the projects success, Arcos decided to implement the practice throughout his branches in factories which were not completing their plan of production. Guevara was enthusiastic and monitored the movement's progress.⁴⁰ Arcos said: 'Che saw it as a sub-system of the BFS because unpaid voluntary labour raises consciousness. With time, I also saw that voluntary labour didn't just influence production, but also consciousness.'⁴¹

The light mechanics branch began to issue bonds for participation in voluntary labour. The bonds served as a receipt, symbolic payment for work carried out for society, as evidence of the effort invested, and as an incentive. Bonds became a kind of currency. Six blue bonds, issued for four hours labour, could be exchanged for one green one, for 24 hours work. The bonds themselves had the profiles and quotes of

³⁸ Silverman, *Socialism*, 18-19.

³⁹ Juan Valdés Gravalosa, interview, 22 February 2006 and Arcos, interview, 2006.

⁴⁰ Arcos, email correspondence summarising a chapter about voluntary labour from his book pending publication in February 2007, 21 September 2006.

⁴¹ Arcos, interview, 2006.

Cuban national heroes: José Martí, Antonio Maceo, José Antonio Mella, Camilo Cienfuegos and Fidel Castro. The latter was quoted: 'We will have what we are capable of producing.' Finally the bonds were exchanged for 'Communist Certificates.' At an award ceremony in January 1964, Guevara presented three new 'Communist Certificates' to members of what became known as the Red Battalion. Those who had completed 80 hours of voluntary labour in the last four months of the year were 'members of the battalion', those who had done 160 hours were 'distinguished members', and those with 240 hours were 'vanguard members'.⁴²

Guevara was clearly impressed with the initiative and attributed the campaign's success to Arcos: 'the compañero whose enthusiasm applied to a concrete task has resulted in a massive mobilisation in his branch.'⁴³ He revealed that the bonds had been vilified by some CTC leaders, and added that the idea of a Communist Certificate was absurd:

'Nonetheless they are an extraordinary success. There are people who in four or five months of emulation have won three Certificates; 240 hours three times which means 720 hours. In four months there are 960 hours in an 8 hour working day and these people have 720 additional hours that means that they are working five or six extra hours a day including Saturdays and Sundays to win one of these Certificates... that has to make us think. This is fantastic.'⁴⁴

The three most outstanding workers were: a man with 980 hours of voluntary labour, additional to his day job, which meant doubling his work day; a worker over 70 years old; and a woman with 340 hours, the most accumulated by a woman. Guevara announced that in the last four months of 1963, 774,344 hours of voluntary labour had been carried out in the vice ministry of light industry, more than half of that in

⁴² Arcos, email, September 2006.

⁴³ Guevara, 'En la entrega de certificados de trabajo comunista', 11 January 1964, in *Obras*, Vol 2, 239. See also Guevara, *Bimestrales*, December 1963, 427.

⁴⁴ Guevara, *Bimestrales*, December 1963, 427.

Arcos' light mechanics branch. The volunteers were like sportsmen, he said, who dedicated themselves to win a race. This was facilitated by the formation of voluntary labour brigades set up and competing throughout the ministry in autumn 1963. First Guevara had challenged Arcos to emulation between the ministry and light mechanics branch. The ministry brigades were called the Red Batallion and by January 1964 there were 20 brigades with ten workers in each committed to a minimum of 80 hours voluntary labour in six months. Guevara was head of the Batallion, De La Fe was deputy and Arcos was co-ordinator, responsible for organising the work and the transport.⁴⁵ By July 1964, the Ministry of Sugar (MINAZ), just created with Borrego as minister, and the Ministry of Justice also adopted the voluntary labour bonds.⁴⁶

Guevara said that the ministry should aspire for everyone to achieve a certificate of 240 hours within one year, which meant over 4 hours voluntary labour every Sunday.⁴⁷ 'We are trying to create "the spirit of October" all year, every month, every day, in all the compañeros,' said Guevara, in reference to the rise in production and productivity during the Missile Crisis in October 1962, as workers rallied to resist imperialist intimidation. The phenomenon was repeated as voluntary labour brigades sprung up in October 1963 after Hurricane Flora wreaked havoc on the island. The spirit of October was: 'The spirit of considering the work that one is doing at that moment as a fundamental task for the country, whatever it is, however humble or simple it is.'⁴⁸ Even bureaucrats were animated by this spirit, said Guevara, as suddenly papers had flown around and problems had been solved.⁴⁹ Through emulation, voluntary labour became an instrument of institutionalising that spirit outside of moments of crisis.

Rosario Cueto Álvarez was Borrego's secretary and a secretary of ORI in the ministry. In one Production Assembly she accepted Guevara's challenge for a brigade to emulate with his team in the sugar cane field:

⁴⁵ Arcos, interview, 2006.

⁴⁶ Guevara, *Bimestrales*, July 1964, 508-9.

⁴⁷ Guevara, *Bimestrales*, December 1963, 428.

⁴⁸ Guevara, *Certificados*, 242.

⁴⁹ Guevara, *Certificados*, 242.

‘The emulation was pretty equal, and then we discovered that Che was sending one of his escorts to spy on us so we started to do the same. The competition was so tense that with pain I have to confess that when I was informed that Che was having an asthma attack I was pleased because it gave us an advantage in the cane cutting. According to the calculations of the regulator my brigade won!’⁵⁰

Guevara was a sore loser, but when the National Institute for Agrarian Reform (INRA) challenged MININD to a contest he sent for Rosario to find out how she had won. ‘I told him everything; I confessed that when I heard that he had an asthma attack I was pleased. He split his sides with laughter when he heard that!’⁵¹ Rosario pointed out how the emulations spread the practice and enthusiasm for voluntary labour. She pointed out that: ‘If I hadn’t emulated with Che, I would never have cut cane because I don’t like it. I did it so that he wouldn’t beat me. But a woman who cuts 200 or 300 *arrobas* in one day yields economic results. It was the same in industry as in agriculture.’⁵²

As participation in voluntary labour accelerated, trade union and ORI representatives in MININD complained they should be in charge of organising the movement as political leaders, not those in administrative roles like Arcos. On Easter Sunday 1964, a thousand MININD workers were mobilised and 20 trucks were needed to transport them to the countryside. Cueto Álvarez complained that Arcos could not organise this alone. She took over with Yolanda Fernández Hernández, a trade union leader in the ministry. They went to the fields to mark out the furrows to ensure that the work was organised. The weekend was a success so Cueto Álvarez insisted that the trade unions should be responsible for this mobilisation. Guevara replied: ‘Rosario, it is true that in the beginning I didn’t have confidence that the trade unions could mobilise and organise everything, but today I see that you can. You are right and it is true that this is a trade union task.’⁵³ The task passed into the hands of the

⁵⁰ Rosario Cueto Álvarez, in Adys Cupull & Froilan González (eds), *Entre Nosotros*. La Habana: Ediciones Abril, 1992, 118.

⁵¹ Cueto Álvarez, *Nosotros*, 118.

⁵² Cueto Álvarez, interview, 20 March 2006.

⁵³ Guevara cited by Cueto Álvarez, interview. See *Nosotros*, 120.

trade union leaders, including Fernández who said that Guevara insisted that voluntary labour be well organized: 'If the work is organised when you take workers there, after you can talk about how much was done and what they are responsible for. This guarantees that the work is awarded later.'⁵⁴

Maria Teresa Sánchez, another UJC cadre and Director of the Department for Technical-Scientific Information, recalled the festive spirit and mischievousness of the youth mobilisations, including one incident where they made a dummy the size of a man, dressed it up, took it to the roof of the ministry at the end of work hours and simulated a fight between two people. When a crowd had gathered they threw the dummy down to the ground, causing panic. The dummy had a sign saying; '*everyone to voluntary labour!*' Guevara was furious and met them to all to discuss it. Fernández recalled that: 'this was when Che told us that the youth should be joyful but serious.'⁵⁵

José Luis Puñales, Director of EC of Beer, said that workers' incorporation into voluntary labour demonstrated how their mentality was transforming. According to his testimony, it did serve to turn work into a social duty and a social pleasure:

'In 1964, our enterprise had one million hours of voluntary labour, only the tobacco and flour sectors came close to us. I was a member of the Red Battalion commanded by Che; you had to do 240 hours of voluntary work every six months, outside your work hours, either holidays or night times. This isn't easy. We practically donated our vacations to this work. Che usually controlled the last hours of the 240 and said where you would do it. He was convinced that voluntary labour had to be hard... For us it was practically an award. We were proud of our contribution. When we began we were few, but it became normal, all the workers committed to voluntary labour. This is what Che called leading by example.'⁵⁶

⁵⁴ Cueto Álvarez, interview.

⁵⁴ Yolanda Fernández Hernández, interview, 24 March 2006.

⁵⁵ Fernández, *Nosotros*, 112. Also Maria Teresa Sánchez, Interview, 8 March 2006 & Sánchez, *Nosotros*, 81.

⁵⁶ José Luis Puñales, interview, 21 January 2005.

However, Guevara made several stipulations for carrying out voluntary labour correctly. These are examined below.

Verifying claims

Guevara instructed MININD's inspectors to verify claims about the number of hours of labour contributed. Director of Supervision, Juan Borroto, recalled: 'There was a worker with 1,500 hours of voluntary labour in six months. This seemed too much to Che and demanded that this was verified, but it was true.'⁵⁷ In the January 1964 ceremony, Guevara did not award Certificates to a list of workers whose claims had been submitted too late to be verified.⁵⁸

The economic versus educational function of voluntary labour

Commentators outside Cuba have pointed to the economic rationale behind the emphasis on voluntary labour and moral incentives, that of capital accumulation.⁵⁹ These attempts to calculate in economic terms the contribution to Cuba's economic development are useful in that they illustrate the scale of mobilisation involved. However, they also miss the important point, the educational and ideological function of voluntary labour. Recognising that unpaid labour accelerates accumulation, Bertram Silverman underscored the political importance of the practice, which, he suggested was: 'a more consistent translation of Marx's idea of primitive accumulation when applied to a socialist society than the route used in the Soviet Union.'⁶⁰ This, he concluded, was the fundamental rationale behind the voluntary labour movement. It is clear that for Guevara, while voluntary labour had to be useful and productive, that was not its principal function. He said: 'The importance of voluntary labour is not reflected in the directly economic aspect that

⁵⁷ Juan Borroto, interview, 26 February 2006.

⁵⁸ Guevara, *Certificados*, 238-9.

⁵⁹ 'The wages saved through unpaid labor apparently exceeded \$300 million [pesos] in the period 1962-67... 1.4% of the yearly average of Cuba's national income during this period.' Carmelo Mesa-Largo, 'Economic Significance of Unpaid Labor in Socialist Cuba'. *Industrial and Labor Relations Review*. Vol 22: 3 (April 1969), 339-357.

⁶⁰ Silverman, *Socialism*, 20.

could be reported to the enterprises or to the state.’⁶¹ On the other hand, ‘inventing’ chores for voluntary labour was aimless and put people off. He said: ‘the most unpleasant sensation that one can have is to waste time. Last Sunday I took part in voluntary labour and wasted my time... I was looking at my watch every 15 minutes... we have to achieve the identification of man with the work, we have to organise it.’⁶² Voluntary labour should be productive and necessary; it therefore could not be programmed by bureaucrats but must respond to production needs as they arose. Additionally, one worker’s voluntary labour could not be the cause of another’s unemployment and so this work had to be practiced outside of normal working hours.⁶³ Borrego dismissed the view that voluntary labour is a form of exploitation to generate surplus value:

‘Voluntary work in socialism is for social and collective benefit. No one would do voluntary labour in a private capitalist enterprise. It is a conception of production that cannot be compared with capitalism. Here the production has a social content. Part of the surplus product goes to investment to develop the country and part to social benefit. Che insisted that voluntary labour be seen as a social duty from which you obtain indirect benefits.’⁶⁴

This was consistent with Guevara’s notion of undermining the law of value through the decommodification of labour. Guevara repeatedly argued that voluntary labour had a pedagogical function which could be converted into: ‘a useful instrument to accelerate along the path toward communism.’⁶⁵ Participation in voluntary labour reflected a rising consciousness acquired at work, a commitment to the socialist transition project, the demonstration of a communist attitude that would carry the masses along by its example.⁶⁶ To forge this communist attitude, labour power had to be expended without financial compensation. The incentive was moral, recognition

⁶¹ Guevara, *Certificados*, 240-1.

⁶² Guevara, *Bimestrales*, July 1964, 508.

⁶³ Guevara, *Bimestrales*, December 1963, 431.

⁶⁴ Borrego, interview, 24 January 2005.

⁶⁵ Guevara, *Bimestrales*, December 1963, 430-1.

⁶⁶ Guevara, *Certificados*, 241.

of an individual's merit as a worker. A new society could not be built without sacrifice. In addition, it was organised as a mechanism for closing the traditional gap between manual workers and administrators or intellectuals, combating bureaucratic estrangement from production, and heightening class awareness. Guevara told MININD directors that: 'more than 80% of us here come from the petit-bourgeoisie, a class with distinct ideological scars which cannot be got rid of just because the system changes. It takes constant ideological work to correct this.'⁶⁷ That ideological work was achieved through voluntary labour, particularly manual labour. Miguel Duque Estrada de Ramos, Director of MININD's Office of Special Issues, confirmed that: 'at that moment those of us from the petit-bourgeoisie were a majority and voluntary labour helped us develop a social consciousness.'⁶⁸ Bureaucrats worked as equals with factory or agricultural workers and directors got to know their subordinates and could experience the problems of production first hand.

To exploit fully the educational and ideological value of voluntary labour, Guevara believed workers had to understand the concrete results of their sacrifice. When workers assembled on Sunday mornings he would make a speech, introduce everyone, thank the employees of the production unit, explain the production process and outline the day's aims. Fernández pointed out that: 'if they hadn't participated in voluntary labour, ministry workers would have only known those industries through documents.' This work certainly broadened her own knowledge of the different sectors and enhanced her concern for the overall progress of the ministry: 'Through voluntary work I learnt to concern myself with the flow of production in industry, with product quality, labour discipline, the organisation and normalisation of work, training and daily heroism in industry.'⁶⁹ In this way, she argued, Guevara was successful in linking consciousness with economic production:

'We spoke with the workers, we toured the factory. Che described the new machines that would be purchased and those which were obsolete. He always made a concrete speech, gave thanks and said what had been

⁶⁷ Guevara, *Bimestrales*, 12 September 1964, 521-2.

⁶⁸ Miguel Ángel Duque de Estrada Ramos, interview, 23 February 2005.

⁶⁹ Fernández, *Nosotros*, 110.

produced. He assessed the cracks, the leaks, contacted the directors. It was a movement which allowed the workers of MININD to be linked to production.’⁷⁰

This process was most effective when workers could see the concrete results, not just read them on paper.

Moral compulsion not obligation

The educational and ideological function of voluntary labour would be undermined if workers felt obliged to participate. Guevara said: ‘one of the things that I consider fundamental and important is that voluntary labour is not obligatory.’⁷¹ On the other hand, Guevara advocated moral compulsion, which meant challenging accepted behaviour patterns, leading by example and adopting voluntary labour as a mechanism to foster progress towards an ideal social paradigm, by lauding desired characteristics as exemplary. He concluded: ‘We uphold the system which Fidel has baptized “moral compulsion”. This method has given good results up to now, even though it has not been carried out in the systematic way required and we have fallen into bureaucracy at times.’⁷² There was a fine line between moral compulsion and obligation, which the youthful exuberance of trade union cadre in MININD threatened to cross. A complaint was once lodged against Fernández who was accused of getting annoyed with a worker who said that he was unavailable for voluntary labour. Guevara reprimanded her: ‘Che told me that this wasn’t right; there were workers with personal problems who truly could not go... I was young and I did not understand that, I just thought that they had a political responsibility that couldn’t be missed. I had to overcome this. I spoke to compañeros, if they didn’t go one day they went another.’⁷³

⁷⁰ Fernández, interview.

⁷¹ Guevara, *Bimestrales*, September 1964, 521-2.

⁷² *Memoria Anual 1961-1962*, in Ministerio de Azúcar. *El Che en la Revolución Cubana: Ministerio de Industrias*. Tomo VI, La Habana: MINAZ, 1966, 684.

⁷³ Fernández, interview.

Guevara insisted that the impulse to participate in voluntary labour had to come from the workers themselves. This was imperative if work was to become a social pleasure. The vanguard could use their personal example as a form of moral compulsion, but they could not make participation obligatory. Miguel Figueras, Director of the Perspective Plan in MININD admitted that he did not attend voluntary work every Sunday. He was young and enjoyed going out on Saturday nights. While Guevara criticised him, saying that voluntary labour was educational, he never obliged him to attend. However, Figueras was swayed by his example: 'He certainly had the will power to go every Sunday.'⁷⁴ In March 1965, on submitting the Perspective Plan for 1966-1970, Figueras told Guevara: "Ok, so that you don't criticise me anymore, on 1 April I am going with all the workers of the Department of the Perspective Plan to cut cane for one month." Che replied that I wasn't doing any more than completing my duty.'⁷⁵ Leading by example was a management principle in MININD. Guevara said: 'The Ministry has always been guided by the policy of example, that means that no-one has the right to expect what they don't do. No one has the right to recommend what they don't feel capable of doing; from voluntary labour to daily work, the enterprise directors should lead their compañeros.'⁷⁶ Cueto Álvarez pointed out that establishing this leadership principle in relation to voluntary work resulted in mass mobilisation, beginning with the 1,000 employees in the ministry it swept up the workers in every production unit.⁷⁷

Numerous anecdotes demonstrate how Guevara's example made workers feel morally compelled to participate, the more so as he persevered through his asthma. Risquet concluded that: 'through his example, Che turned voluntary labour into an expression of a healthy man and the will to work for society.'⁷⁸ Eugenio Busott, a member of MININD's Management Council said: 'We tried to act like Che, to work many hours as well as voluntary work. We started to see our comrades in a more humane way. I started to feel a great sense of camaraderie, especially through voluntary labour because you give something without personal gain. We participated

⁷⁴ Miguel Alejandro Figueras, interview, 27 January 2007.

⁷⁵ Figueras, interview.

⁷⁶ *Memoria 1961-1962*, MINAZ, 684.

⁷⁷ Cueto Álvarez, interview.

⁷⁸ Risquet, interview.

willingly, lovingly, and we felt great. No amount of money in the world can buy that feeling.’⁷⁹

In the final bimonthly meeting of MININD, Guevara gave an exposition of the importance of voluntary labour as a measure of a new attitude towards work, work as a social pleasure:

‘There is a very beautiful phrase from Mao, something like “man as an alienated being is a slave of his own production”, a slave to work, handing over his work, handing over part of his nature with it and he only realises himself as man when he does things that are not necessary to his physical being, that means, when they are transformed into an art or, for example, when he does voluntary labour or something that yields a little for society, something that man hands over. We still have not achieved the point when man hands it over; rather we have created an apparatus where society sucks up voluntary labour. I don’t know whether you can understand this disquisition, but it is very distinct. That man feels the necessity to do voluntary labour is an internal thing. The two should be united. The environment should help man feel the need to do voluntary labour, but if it is only the environment, the moral pressure that obliges man to do voluntary labour, then the evil of man’s alienation will continue, that is to say, they are not doing something intimate, a new thing, done in freedom so they don’t remain a slave to work.’⁸⁰

Voluntary labour was just one aspect of the mechanisms which Guevara created to move away from man’s alienation, changing the social-relations of production and undermining the law of value at its root. Voluntary labour has become an integral part of productive life in Cuba. By 1968, 15-20% of the agricultural labour force was estimated to be made up by non-agricultural workers. Silverman said: ‘Such a transfer of labour could only make economic sense if it was based on moral rather

⁷⁹ Eugenio Busott, interview, 9 December 2004.

⁸⁰ Guevara, *Bimestrales*, December 1964, 562-3.

than material incentives. Cuba's investment into social conscience could be tapped.'⁸¹

In the 1966 sugar harvest only 1.7% of around 300,000 workers who participated in voluntary labour received material rewards so arguably their participation was not motivated by material aspirations.⁸² During the mobilisation as part of the campaign for a ten million ton sugar harvest in 1970, Jacqueline Kaye wrote that: 'The Revolution is attempting to rehabilitate the *zafra* [harvest] as a symbol not of exploitation but of independence and achievement, and it is an attempt of some psychological complexity which it is difficult for us to appreciate fully.'⁸³ Bernardo argued that the renunciation of overtime payment is another form of voluntary labour. From late 1967 this was faded out so that by the second half of 1969, overtime pay had been eliminated.⁸⁴ However, this and other measures were introduced after Guevara's departure from Cuba, and the consequences or results of such policies should not be considered to reflect directly on him.⁸⁵ However, Guevara made a decisive contribution in introducing, fostering and institutionalising voluntary labour and socialist emulation. For Guevara these were tools to embed the concept of work as a social duty within the BFS. They are tools which remain integral to Cuba's socio-economic and political infrastructure.

REHABILITATION CENTRE AT GUANAHACABIBES

The Rehabilitation Centre at Uvero Quemado, in Pinar del Rio province in the east of Cuba, was on the Guanahacabibes peninsula, the name by which the Centre became known. There are two important characteristics about the Centre. First, only EC directors and other ministry management personnel were sent there, not administrators of production units, nor the production workers. Second, going to the

⁸¹ Silverman, *Socialism*, 19.

⁸² Bernardo, *Incentives*, 58.

⁸³ Kaye, Jacqueline (ed), *The New Man in Cuba*, London: The Britain-Cuba Association, November 1969, 1.

⁸⁴ Bernardo, *Incentives*, 1964.

⁸⁵ See introduction to Part 4.

camp was optional; those who did not accept the reprimand could reject it by leaving MININD. Given the voluntary nature of the camp, and its political education function, Guanahacabibes is assessed as one of the policies formulated within the BFS which aimed to raise consciousness. It was a kind of moral disincentive.

The roots of Guanahacabibes lay in the hard labour camp set up by the Department of Education of the Rebel Army on Cayo Largo in 1959 for soldiers under reprimand. Guevara was involved with Cayo Largo in his capacity as head of training for the Rebel Army. Cayo Largo is a sandy, mosquito-plagued island of 32 kilometres long, a maximum of 800 metres wide and three metres above sea level. 200-300 members of the Rebel Army were sent there instead of to prison for undisciplined behaviour or pretty crimes. They worked on construction. Cayo Largo was not considered safe for civilian projects because of the threat of military attack; it is close to the Playa Giron where the Bay of Pigs invasion took place in April 1961.

After the Department of Industrialisation was set up, Guevara sent Jorge Ruiz, a leading member of the 26 July Movement and an architect, to assess the camp. Ruiz recalled the tough conditions:

‘The soldiers remained armed due to prevailing myths created during the revolutionary process that no-one could be disarmed. There were no women, no drink, you had to be in the water between 5-10pm because the air changed and the mosquitoes would eat you... Cayo Largo was very primitive; those in charge had the capitalist world as their frame of reference. There was a rock that jutted out 300 metres and the directors at Cayo Largo would make soldiers sit on the rock for four days to punish them. It was very bad, lots of mistakes were made.’⁸⁶

Edison Velázquez, head of Inspection in the Department of Industrialisation, became the first director Guevara sent to Cayo Largo, following a complaint that he had

⁸⁶ Jorge Ruiz Ferrer, interview, 5 April 2006.

abused his authority by harassing a female colleague. The story illustrates an important characteristic of Guevara, that he was most demanding on his closest collaborators. The complaint was anonymous, but Guevara insisted it could not be ignored because Velázquez's role demanded absolute moral infallibility. Velázquez denied the accusation. He said:

'We could argue with Che. We were both revolutionaries. We were both annoyed. He said that this undermined the trust they had placed in me. This was unjust. I continued this polemic with him for many years. I always held a grudge about it. He sent me to Cayo Largo, where I worked in construction and did guard duty, while the crocodiles walked right past. A plane came once a week with correspondence and to take away the sick.'⁸⁷

When Velázquez sent a note to Enrique Oltuski, a colleague on the Management Council of the Department, Oltuski spoke to Guevara who said that he was very pleased Oltuski had raised the issue as he had discovered a new quality in him, solidarity. Guevara told Oltuski that he could replace Velázquez there if he wanted.⁸⁸ Guevara was intransigent about the need for discipline and accountability.

Ruiz's recommended that the camp at Cayo Largo be closed down and that inmates either be given licence to return to the armed forces, sent to goal to finish sentences for crimes committed, sent to school, or just released. Cayo Largo was gradually transformed from a punishment centre into fishing centre and tourist resort, which it remains today.⁸⁹ However, during this process, Ruiz said that Guevara got so

⁸⁷ Edison Velázquez, interview, 19 January 2006.

⁸⁸ Velázquez, interview, 19 January 2006. Needless to say, Oltuski declined the offer. On return for Havana, Velázquez was substituted as Head of Inspections. A few months later, Guevara nominated him as the Department's delegate of Las Villas province. It was a sign of confidence given the political problems in that province. In 1963, Velázquez became Director of EC of Nickel, an industrial sector which Guevara prioritised. Velázquez had regained Guevara's trust, but Velázquez's bitterness is evident in his arguments with Guevara in the MININD bimonthly meetings.

⁸⁹ 'First we built a school of fisheries. In the north of the Cayo we put industry to tin and salt the fish. Later, when the military situation was less precarious, we turned the east of the island into a tourist centre with a hotel and wooden cabañas. Thus, I converted it into a centre of awards. At one point all of the national schools of Cuba sent people there for the weekend as an award.' Ruiz, interview.

annoyed with the people in charge there that he wiped his hands of the issue.⁹⁰ Meanwhile, he sent Ruiz to find an alternative venue for a rehabilitation camp for MININD which would have an educational function. Ruiz chose the Guanahacabibes peninsular.

Before the Revolution this territory belonged to a US logging company and after 1959 a foundation of farm workers was set up there to replant trees; pines, eucalyptus and fruit trees. Directors sent from MININD provided a labour force to assist them and to build the infrastructure, including a landing strip for Guevara's plane. Initially, the men slept in the open air. Then they made tents, then wooden huts, then houses of cement and iron. Gradually in addition to MININD directors, military personnel were also sent there and students who had abused foreign scholarships and been expelled from the socialist bloc countries where they were studying.⁹¹ Arcos calculated that there were between 60 and 80 people there, most of them for three or six months.⁹² In setting up the Centre, Ruiz said: 'We had learned from our revolutionary principles about the errors committed in Cayo Largo. You have to understand Guanahacabibes as part of an integral system in MININD. It was physically tough but it was more moral than physical.'⁹³ There was no legislation to send people to Guanahacabibes, it was an initiative introduced by Guevara, which some of the Revolution's leadership did not approve.

Guanahacabibes was for those who had committed administrative errors. Those accused of criminal activity were sent to a normal criminal court. Initially, Guevara himself determined the punishment for administrative failings, such as adjusting inventories, carrying out unauthorised investments, ignoring MININD's regulations and other miscalculations which jeopardised production and planning. Then the Administrative Disciplinary Commission (CODIAD) was set up. As Head of Supervision, Juan Borroto was involved in the Commission. He said: 'When Che created the CODIAD he told us that he had made a mistake at the beginning by

⁹⁰ Ruiz, interview.

⁹¹ These included Cubans expelled from socialist bloc countries for causing a scandal through sexual relations with the natives. Others had simply not studied.

⁹² Arcos, interview, 2006.

⁹³ Ruiz, interview.

taking unilateral decisions and he preferred they were made by the CODIAD.⁹⁴ The Commission's most severe punishment for administrative errors was to recommend someone be sent to Guanahacabibes for between one month and one year.

When a *compañero* was sent to Guanahacabibes they made the journey alone. This involved several buses, trucks and a long walk; a journey of 350 kilometres which took 5 to 6 hours. All of which reinforced the voluntary nature of the reprimand. Directors had plenty of time and personal incentive to pull out, and only a sense of revolutionary commitment stopped them doing so. As MININD's Director of Personnel it was Arcos' responsibility to dock the workers' salary during their time there and prepare the report which directors took with them. Directors turned up and showed the report to Barbaro Camejero, who ran the Centre. He discussed the report with directors and explained: 'why you needed to work on your character to be part of the revolutionary vanguard.'⁹⁵ Arcos said: 'If you live 25-35 years under capitalism, you retain many characteristics from capitalism. You work under socialism, you are a socialist and a revolutionary, but your old life has influenced you. If you made an investment that wasn't approved, it didn't benefit you, but you were undisciplined.'⁹⁶ After the days work, there were evening study circles. Arcos described the first directors of Guanahacabibes, Johnson and Montalbo, as bandits who directed the Centre badly until they were replaced by Camejero who understood the educational function which Guevara assigned to the place.

In January 1962, Guevara complained that it was a conceptual mistake to regard the Guanahacabibes as a feudal sanction. It was a revolutionary sanction for revolutionaries who committed mistakes and who should know better, he said. Doubtful cases should not be sent to Guanahacabibes and criminal acts should be punished with prison, whoever carried them out: 'To Guanahacabibes we send the people who should not go to prison, people with more or less serious failings of revolutionary morality... In other cases it is not punishment but a kind of re-education through work. The work conditions are hard, but not bestial. And they are

⁹⁴ Borroto, interview.

⁹⁵ Arcos, interview, 2006.

⁹⁶ Arcos, interview, 2006.

in charge of improving those conditions themselves.⁹⁷ He acknowledged that some *compañeros* considered Guanahacabibes to be an unjust reprimand, but insisted that people who had been sent there had a positive view:

'I have recommended to the *compañeros* on the Management Council of the ministry that they go... Among the castigated are political cadre of the first magnitude. A foreign comrade was there for nine months, who taught the others and was very good there. Of the people that I have seen there, none have left feeling bitter or angry. One should not have this concept of Guanahacabibes [as a feudal punishment] because otherwise you run the risk that people who go there think of it as the end of the world. We don't consider it that. And people go to Guanahacabibes to work; it isn't their undoing or anything like that... In addition, those who go to Guanahacabibes are those who want to go. Those who don't want to go leave the Ministry. No-one should go to Guanahacabibes who does not want to go, but they leave the Ministry and work somewhere else. There is no opposition to this.'⁹⁸

Guevara pointed out that indiscipline was punished in this way in the army. Given that many MININD directors had been in the Rebel Army or the underground movement in the cities it is not surprising that they took the concept on board when applied to industrial management.

In the July 1962 MININD bimonthly meeting there was a detailed discussion about three directors, all present at the meeting, found guilty of administrative errors. Only one of them had been sentenced to Guanahacabibes. The cases serve to illustrate the kind of administrative indiscipline which occurred and how the each case was judged on its merits. Guevara admitted:

⁹⁷ Guevara, *Bimestrales*, 20 January 1962, 166.

⁹⁸ Guevara, *Bimestrales*, January 1962, 167.

‘It is true that our justice system is applied a little elastically, reprimands are not the same for everyone because there are antecedents... this is established in the justice systems throughout the world, from bourgeois to socialist justice... It is evident that justice cannot be applied mechanically, nor do we have set squares or electronic machines to impose punishments in every case. We need to investigate every case... there is no set square Guanahacabibes.’⁹⁹

The first case concerned the director of the EC of Pharmaceuticals. A National Commission investigating the situation of medicines in Cuba had claimed that the enterprise was not making use of the raw materials in its laboratories. The EC denied this without checking and compiled a new list of supplies it required from abroad for the Ministry of Foreign Trade. The director, Rubén Vicente, was not present when the Commission investigation took place, but on his return he ignored its recommendation that serum could be made in Cuba, which would save the country \$500,000 annually on imports. The reprimand was applied not just because the director lacked knowledge of the materials in the EC storage, of which most managers were guilty, but because Vicente had ignored the Commission’s report because he objected to their attitude. As he had previously been sanctioned to one month in Guanahacabibes for an unrelated administrative error, he was dismissed from MININD. Guevara insisted: ‘We have to demand that enterprise directors have “sole responsibility” for the care of the enterprise. This has to serve as example to everyone. We have fallen into a rut of irresponsibility at all administrative levels of this government.’¹⁰⁰ Claims and denunciations had to be investigated. The director should have asked the Department of Supervision to investigate the laboratory.¹⁰¹ Vicente accepted his substitution, criticising the ministry management for not investigating the ECs to detect errors.¹⁰²

⁹⁹ Guevara, *Bimestrales*, July 1962, 264-5.

¹⁰⁰ Guevara, *Bimestrales*, July 1962, 257.

¹⁰¹ Guevara, *Bimestrales*, July 1962, 261.

¹⁰² Vicente, *Bimestrales*, July 1962, 264.

The second case involved Manuel Marzoa Malvezado, director of the EC of Basic Chemicals who was sanctioned for one month in Guanahacabibes for 'pirating' a technician from another enterprise without the appropriate vice ministerial approval. That meant persuading a specialist to transfer from another institution to his own. Guevara said this was: 'against all the norms that we have established and discussed, [workers should not be pirated] from any state apparatus least of all from within the ministry.'¹⁰³ Marzoa spoke to clarify that he was not sent to Guanahacabibes for 'pirating', but for contracting an engineer for a management role without authorization from the vice minister. He had already served his sentence at Guanahacabibes and returned to his post.

Thirdly, director of the EC of Cigarettes, Agüero, was to be replaced for an error: 'that was not extremely serious, but one that indicates failings in administrative discipline, with the antecedent of not being a brilliant director, nor of being new.'¹⁰⁴ Agüero accepted the sanction and said he hoped it served as an example to other directors.¹⁰⁵ In Guevara's schema, it was vital that the director was enthusiastic and committed to improve production and when they no longer felt capable of sustaining that work they should move into a role with less responsibility:

'To lead a revolution, to have the glory of participating in a management post in the construction of socialism, it is vital... to be concerned throughout the day with whether the enterprise is advancing or not... We have to revive the policy of continuously demanding. Evidently, we first need to have the authority to demand because we have fallen slightly into complacency, into peaceful co-existence with errors.'¹⁰⁶

Again this illustrates the emphasis Guevara placed on leading by example, accountability for social production and on self-transformation through the process of revolutionary transition. Guanahacabibes was one of the experimental solutions

¹⁰³ Guevara, *Bimestrales*, July 1962, 259.

¹⁰⁴ Guevara, *Bimestrales*, July 1962, 259. It is not clear what administrative error Agüero had committed.

¹⁰⁵ Agüero, *Bimestrales*, July 1962, 264.

¹⁰⁶ Guevara, *Bimestrales*, July 1962, 258-9.

practiced within MININD to foster these new attitudes. Ensuring that the educational function of Guanahacabibes was prioritised, Guevara visited the Centre regularly, staying for the weekend and speaking to the workers. When one of the founding members of the Department of Industrialisation, Francisco García Vals, known as 'Pancho' was sent to Guanahacabibes, Guevara visited every weekend to play chess with him and ensure he understood his error.¹⁰⁷

Velázquez and Arcos claimed that those who worked with Guevara were revolutionaries who accepted that he was demanding and never chose to leave the ministry instead of going to Guanahacabibes. In fact, said Arcos: 'many people got confused and thought this was part of a test to see if they were revolutionary. Just like when someone goes up Pico Turquino three times, so someone else climbs up five times.'¹⁰⁸ It was part of the notion that steel is forged in fire and that tough conditions and the spirit of sacrifice for national interest and the Revolution made stronger *compañeros*. As branch director, Arcos took his enterprise directors to Guanahacabibes for a management board meeting, for manual work and afterwards to go to the beach. This was part of a team-building exercise to encourage directors to commit to improve the performance of the branch:

'I organised a management board meeting in Playa Giron [Bay of Pigs], one in Oriente where the Granma boat arrived, in the Principe prison... I took the directors to Guanahacabibes with those whom they had nominated as their substitutes. There were about 25 of us. We went in '65 in the last stage of the epoch; we went in a truck to spend two days there. After working we went to the beach. I was with them, their boss and *compañero*.'¹⁰⁹

The cases cited above of Velázquez, sent to Cayo Largo and Manuel Marzoa sent to Guanahacabibes provide evidence that no stigma was attached to such sentences.

¹⁰⁷ Sánchez, interview.

¹⁰⁸ Arcos, interview, 2006. Pico Turquino is the highest mountain in the Caribbean, where the Rebel Army had a stronghold during the war against Batista. Going up this mountain is considered homage to the revolutionaries and a challenge of fitness.

¹⁰⁹ Arcos, interview, 2006.

Both those *compañeros* returned to management positions in MININD. Velázquez affirmed that: 'it was a moral sanction. Once it was completed you returned to your work re-vindicated.'¹¹⁰ Sánchez said people went with dignity: 'because to go there was to pay for your mistake and when you returned to the ministry it was an opportunity to rectify that error.'¹¹¹ Puñales said: 'if Che told us to go to Guanahacabibes, we went satisfied, content, and happy and returned to our post of work. This was the faith that we had in him as a leader.'¹¹²

There is a major issue of conception in relation to any Rehabilitation Centre, especially one involving hard labour and particularly given the harsh reality of labour camps in other socialist bloc countries. However, the voluntary character of the sentence at Guanahacabibes lends weight to Guevara's claim that it was not a feudal sanction but one of a complex of mechanisms designed to focus directors on production and raise their consciousness by linking their own wellbeing to the progress of the enterprise they managed in the interests of the society as a whole. In other words, Guanahacabibes formed part of the mechanisms designed to forge the concept of work as a social duty.

SAN MIGUEL DE LOS BAÑOS

San Miguel de los Baños in Matanzas province was a holiday resort set around hot springs. A disused hotel there passed into the jurisdiction of the Department of Industrialisation. Guevara proposed it remain a hotel and that workers who were burned out were sent there to recuperate.¹¹³ Cueto Álvarez said Guevara took direct control over this facility: 'Che regarded this policy as essential, he personally authorised who was sent there. He didn't leave this job to anyone.'¹¹⁴ San Miguel de los Baños was not a moral incentive, a lever to action such as socialist emulation and

¹¹⁰ Velázquez, 19 January 2006.

¹¹¹ Sánchez, *Nosotros*, 82.

¹¹² Puñales, interview.

¹¹³ Arcos, interview, 2006. Information also from Arcos interview, 8 December 2004.

¹¹⁴ Cueto Álvarez, interview.

voluntary labour. Neither was it a moral disincentive, like Guanahacabibes. However it was one of the BFS mechanisms which placed human beings at the centre of production and socialist construction.

As MININD's Director of Personnel, Arcos was responsible for processing the lists of workers' names proposed by the EC management for rest and recuperation. They were sent to San Miguel for between three and six months, longer if necessary. All their costs were paid by the ministry and Arcos added: 'There were cases when we would send someone's wife with them.'¹¹⁵ Capitalism is concerned only with the workers labour power, socialism, on the other hand, must be concerned for his wellbeing. To this ends, Guevara dedicated ministry time and resources to look after the workers.

Guevara believed that social consciousness, the subjective element, could become so powerful a force that it constituted an objective fact. This view is evident in the formulation of the *foco* theory of struggle where the guerrilla group constitutes a vanguard which can create the conditions for revolution.¹¹⁶ This is also evident in his reference to the 'spirit of October'. However, when the mass was disaggregated to the level of individuals more delicate tools were necessary to assess the state of consciousness. That was the role which Guevara assigned to psychology, a science which he embedded into the structure of MININD. The importance of psychology in evaluating individuals was particularly important given that of a handful of *compañeros* took on incredible workloads and responsibilities. Such pressure occasionally proved to be overwhelming, to the detriment of the individual and the ministry. In this sense MININD's psychologists served as a preventive measure, analysing the capacity of individuals before they were exposed to such intense stress. MININD's psychology apparatus is examined below.¹¹⁷

¹¹⁵ Arcos, interview, 2006.

¹¹⁶ See Guevara, *Guerrilla Warfare*. London : Pelican Books, 1970.

¹¹⁷ This has never been written about before, hence the reliance on oral history.

PSYCHOLOGY

*'I think that Che's interest in psychology was logical, he was an intelligent person, with an enormous cultural vision, with many experiences of the world and, what's more, from Argentina, a country where they work a lot on psychology. He understood that psychology was a tool for understanding the workers better, to achieve the definitive goal; that workers would feel better at work. Psychology was a technique with many elements which could achieve labour stability and give inexperienced leaders techniques, a methodology, to assist them. This was the objective.'*¹¹⁸

Arguably, Guevara's interest and use of psychology originated from his Argentinian roots, rather than in the application of psychology in other socialist countries. Psychology and psychiatry had penetrated Argentinian intellectual circles far deeper than in any other Latin American country, particularly within the medical profession. Guevara graduated as a medical doctor in Argentina in 1953. Mariano Ben Plotkin said from the 1910s: 'psychoanalysis was discussed in medical and cultural circles; but because of the prestige of French culture in Argentina, Freud was read mostly in French and understood usually through the filter of French psychiatry and psychology.'¹¹⁹ Alberto Granado, Guevara's childhood friend and travelling companion, confirmed that Guevara was reading Freud in French at the age of 14.¹²⁰ Guevara had set up a Psychology Group in La Cabaña fortress in January 1959, well before his first visit to a socialist country. Emphasising Guevara's support for psychology, Borrego speculated that this was influenced by his medical training and stated that: 'Che combined the psycho-social element a lot in management.'¹²¹

¹¹⁸ Norma Marrera, interview, 31 January 2005.

¹¹⁹ Ben Plotkin, 'Freud, Politics, and the Portenos: The Reception of Psychoanalysis in Buenos Aires, 1910-1943' in *Hispanic American Historical Review*, Vol 77: 1 (Feb 1997), 73.

¹²⁰ Alberto Granado, cited by Ariet, *Políticos*, 30.

¹²¹ Borrego, Seminar, *Diplomado: Pensamiento Latinoamericano, Che Guevara*, Facultad Latinoamericana de Ciencias Sociales (FLACSO), University of Havana. 18 January 2006.

Days after arriving in La Cabaña fortress at dawn on 3 January 1959, a literacy school was established for the Rebel Army soldiers in Guevara's column. Guevara also invited pedagogical psychologists, philosophers and other social science professionals, according to the psychologist Nury Cao: 'to investigate the psychological and intellectual characteristics of the rebels in his column with the intention of figuring out or categorising these people and determining their level of development, in the educational and labour spheres.'¹²² These professionals became the Psychology Group which was later integrated into the Department of Training in INRA, in November 1959.

The protagonists were three Cubans, Dr Graciela del Cueto and Dr Gustavo Torroella both pedagogical psychologists, and Commander Humberto Castello, a psychiatrist and revolutionary combatant in the Revolutionary Directorate.¹²³ Initially their work involved devising and applying psychometric tests to assess candidates for study scholarships abroad, to ensure that they would have the necessary commitment to carry through their studies for long periods of time, far from home, mainly in the socialist bloc, with vastly different cultures, languages and climates.

In February 1961, this group was integrated into MININD as a Section of Psychology. In 1963, the Section became the Psychology Département, first within the Office of Personnel, directed by Arcos before being transferred to the Training Department within the Vice Ministry of Technical Development, led by Tirso Sáenz. They continued to employ psychometric tests for candidates for studying abroad and similar tests were applied to current and perspective employees for administrative positions in the ministry: factory administrators, EC directors, ministry directors and vice ministers. The tests assessed candidates' motivation for study, communication skills, imagination and creativity. Given the frenzy with which administrators had been nominated during the nationalisations and the exodus of management and technical personnel, this also served as a retrospective evaluation of the new

¹²² Nury Cao, interview, 11 February 2005.

¹²³ Torroella is considered to be one of the founders of psychology in Cuba. After establishing contact with him during the field work, Torroella agreed to meet for an interview. Sadly, however, he died before this took place.

leadership. In addition, the Department advised these managers on leadership and communication skills. Dr Cueto headed this work and applied the test with a group of three helpers, which apparently did not include Torroella and Castello.¹²⁴ Nury Cao joined MININD in 1963 as a special assistant to Dr Cueto: 'The main tasks in which I was personally involved were linked to evaluation, diagnosis and guidance for the ministry personnel, management cadre, candidates for scholarships to study abroad or in Cuba, technical cadre, innovators, and so on.'¹²⁵

Cueto's team assessed workers proposed as students for MININD's Administrators School, which involved an intensive one-year study with an entrance requirement of sixth grade. Students with second grade had been sent there to study and found they just could not cope. According to Guevara, Cueto complained that this showed: 'a tendency to consider man as a number.'¹²⁶ Enrolment at the School depended on the Cueto's confirmation that the candidate could deal with the pressure of the course.

In October 1963, Guevara explained that Cueto had categorised a group of young workers as super-gifted, they lacked sixth grade qualifications but they were intelligent. A new school would be set up, he said, for those workers with the intention of speeding them along to sixth grade and on to pre-university level as quickly as possible. 'Here the famous psychoanalysis, which is so condemned, is playing its role', said Guevara sardonically, adding: 'you all know who the intelligent youngsters are; they are truly interested, aware of everything'.¹²⁷ The purpose of this fast-track education was to create specialists for production; to contribute to the development of the productive forces. Psychology was being applied in the interests of production.

Borrego said that along with Guevara and rest of the MININD leadership, he took the psychometric tests regularly. He explained:

¹²⁴ All three of these protagonists have died and it has not been possible to get more details about their work.

¹²⁵ Cao, interview.

¹²⁶ Guevara, *Bimestrales*, March 1962, 184-5. See chapter 6 for details about the Administrator School.

¹²⁷ Guevara, *Bimestrales*, 12 October 1963, 407-8.

‘...it was another way of practising by example and demystifying the practice of this method, because in that epoch there was a certain reticence from some leaders in the country. [In MININD] the use of psychological tests was considered to be an important aspect, but not definitive, in the selection of the directors; however, when the diagnosis of the psychologists revealed specific conditions that were limitations for the suitability of the cadre, these results were respected to the extent that the designation did not take place at all, even when the other people who knew them insisted on the nomination.’¹²⁸

Arcos admitted that he rejected the validity of the psychologist’s conclusions on proposed nominations. He was generally sceptical about psychology, which was particularly problematic because, as head of the Office of Personnel, he was in responsible for the Department of Psychology. When Arcos had taken the psychometric test he defiantly carried out the instructions in reverse. He recalled: ‘But incredibly, when I finished Cueto did an analysis of my personality which was so perfect that I was shocked.’¹²⁹ Nonetheless, Arcos remained dubious until an incident over a nominated director convinced him of the value of psychology. Cueto’s report suggested that the candidate was a repressed homosexual. The man was a colleague of Arcos, had shared a room with him and had been in love with his sister. Arcos fervently refuted her assessment to Guevara and refused to sign the report. Arcos explained:

‘Two months later a bloke from security arrived and said “last night I went to the cinema and this director was there and he touched-up another man’s penis.” I had to tell Che. When I showed him the report he started looking on the floor around me. I asked him “what are you looking for Commandante?” and Che said “I am looking for the bucket of shit that you need to pour over your head!” From that day on I began to believe in this woman.’¹³⁰

¹²⁸ Borrego, *El Camino del Fuego*, La Habana: Imagen Contemporanea, 2001, 66-7.

¹²⁹ Arcos, interview, 2006.

¹³⁰ Arcos, interview, 2006.

Borrego underlined the value of the psychometric tests applied to candidates for management positions. He said:

‘We had schizophrenic people, with all sorts of problems. If they hadn’t seen the psychologist they would have caused havoc. You can’t put people with serious problems to manage a factory. There were people who appeared normal, but they had their cables crossed, they made tremendous speeches but they were insane.... We went through this test every three to four months. You think you’re fine but the stress is killing you. People have to be able to rest. I remember a *compañero*, an extraordinarily good guy who, because of the lack of cadre, at one point was leading the petrol industry, the mineral resources industry and another enterprise, because he was extremely talented and worked hard. One morning his wife rang me at home and said he had gone into the shower with his military uniform. I spoke to him and he told me he was a rabbit! He was completely burnt out; he spent six months in hospital.’¹³¹

Borrego’s point is that individual capacity to cope with stress, sleeping little and handling huge responsibilities varied, and that the psychometric tests could help to assess this capacity. Guevara must have discussed the results of his own tests with Cueto. He used the psychologists’ analysis to improve his own management and communication skills. Cao recalled that Guevara visited the Psychology Department at regular intervals. She remembered one occasion when he was deeply concerned because a *compañero* he had told off had attempted suicide. Many members of the young man’s family in Mina del Frío had been killed during the revolutionary struggle. Cao explained:

‘The lad had been traumatised by what had happened to his family. But Che was worried that the way he had spoken to the lad had driven him to do this. Fortunately, nothing serious happened to the lad. Not everyone had the ability to understand Che’s attitude. These anecdotes show the

¹³¹ Borrego, *Diplomada*, 18 January 2006.

sense of responsibility that Che felt with regard to human relations and emotions. He got a lot of support from psychology to be a better leader and to have better human relations with his *compañeros*.¹³²

In one bimonthly meeting, Guevara made a candid statement about his personal weaknesses, in front of around 400 MININD colleagues. He was responding to Velázquez who had claimed that *compañeros* did not give their real opinions or reveal their production problems for fear of Guevara's reaction.¹³³ Guevara said his explosive character was a deficiency that had been recognised, even in the Council of Ministers: 'I don't have just have an explosive character when dealing with people who are hierarchically below me, I am explosive. It is a defect that I am correcting within the Revolution, but it is not easy to correct.'¹³⁴ Guevara was emphasising the dialectic of self-transformation through the Revolution; an anti-dogmatic view that human beings are capable of developing and changing through experience and education. Revolution was a process which transformed the psyche of people. When the tests revealed 'weaknesses' inconsistent with the paradigm of revolutionary leader, *compañeros* could still take up the new management positions, but were encouraged to strengthen their characters through that work. José Luis Puñales said his psychometric test analysed him as too self-sufficient.¹³⁵ He said: 'I worked to eliminate this problem.'¹³⁶

Guevara argued that psychology could be applied as a tool for strengthening the connection between managers and the masses. Under capitalism, he said, this was institutionalised as industrial psychology: 'We have Dr Cueto here precisely to attempt to advance this as much as possible.' However, he complained that she worked in the face of indifference and distrust, sometimes of a philosophical nature:

¹³² Cao, interview.

¹³³ Velázquez admitted that these comments were part of his polemic with Guevara since being sentenced to Cayo Largo in 1959, see above.

¹³⁴ Guevara, *Bimestrales*, 10 August 1963, 371.

¹³⁵ In Cuba this word has the connotation of arrogance.

¹³⁶ Puñales, interview.

‘...because of false Marxist concepts and haggard old dogmatisms that men are equal, that you cannot measure the intelligence or character of man, etc. On the other hand, this is also because people don’t like to have the corners of their mind probed ... However, this is a science that is developing, that the capitalists use in a cold way, they value it in pesos and centavos...’¹³⁷

Guevara worked to integrate the work of psychologists with the rest of the MININD apparatus, particularly the Department of Supervision. Psychologists gave guidance to *compañeros* carrying out inspections, investigations and audits, who, in turn were integrated into the function of evaluating candidates for management positions.¹³⁸ That meant that in addition to the psychometric tests, candidates were subjected to observation at work and integral assessment. Borroto explained:

‘The investigators had to carry out an investigation of the cadre in the last ten years, the inspectors had to do a functional inspection to see how the cadre were managing, how they gave orders, the two auditors then worked with the cadre for two weeks to see their approach to economic and political work. Afterwards they summarised the results of that work, explaining their conclusions and finally they made a report.’

There is little evidence that administrators or directors nominated in the frenzy of nationalisations had caused disruption to production by anything other than their incompetence. However, as the Revolution radicalised and consolidated, individuals could become disaffected or be recruited into the counter-revolutionary movement, increasingly organised and co-ordinated with US support. Mercenaries and dissidents employed industrial sabotage and terrorism to attack the Revolution. Arguably, these rigorous evaluations of cadre, both their track-record and their mental state, served to ensure that saboteurs did not infiltrate administrative structures in MININD. The following story serves as an example of how the ministry kept one step ahead in this

¹³⁷ Guevara, *Bimestrales*, December 1964, 561-2.

¹³⁸ Fernández, interview.

battle. In 1962, Salvador Sala Portuondo, became director of the Cuban Institute for Petroleum (ICP), a vitally important part of the MININD apparatus. Sala had trained in the US and worked for Shell in Cuba pre-1959. His leadership of the ICP was distinguished. One day, Guevara informed Sala that his brother, a refinery engineer, was a member of a group organised by the CIA. He had not been detained so that Cuban intelligence could collect more information about their activities. Guevara told Sala to keep this a secret from his brother, which he apparently did.¹³⁹

The rigour of cadre evaluations by 1964 also illustrates that MININD was in a position to be more demanding about the technical and leadership skills of candidates. Standards and expectations were rising. Despite the rigour of the assessments, Borroto claimed that few cadre were not approved for the management jobs: 'If the cadre had limitations their superiors were told in order to assist them in this.'¹⁴⁰

Social psychology of work

*'When Che was Minister of Industries we began the social psychology of work, concerned directly with the workers, not from the point of view of the psyche, but to create better conditions so they would feel linked to their work and be more efficient, with more knowledge about what they produced and better self esteem. Next it was taken up in the Ministry of Sugar, where Orlando Borrego was Minister, and which was directly linked with Che. Later, many institutions became interested in the psychology of social work...organisations of the masses like the Union of Young Communists and the Federation of Cuban Women began to integrate psychologists into their social assistance tasks.'*¹⁴¹

¹³⁹ Sáenz, *Ministro*, 84. A few years later Sala was director of the Cuban Institute of Mineral Resources, he was removed from his post and then left the country on a private boat.

¹⁴⁰ Borroto, interview.

¹⁴¹ Norma Marrera, interview, 31 January 2005.

In 1964 the Section for the Social Psychology of Work was set up within MININD's Psychology Department. It was headed by an Argentinian psychologist Raquel Hoffman who was introduced to her compatriot, Guevara, by INRA President Carlos Rafael Rodríguez after she arrived in Cuba offering her assistance to the Revolution. A request was sent to the Faculty of Psychology, set up in the University of Havana in 1962, for three students interested in this area of psychology to join the new Section. Norma Marrera, Nerada González and Nancy Zamorra were selected because they were both interested in this area, as opposed to clinical psychology, and were members of the Union of Young Communists.¹⁴² Their task was to visit MININD production units around the country to observe, assess and make recommendations on improving workers conditions and relations with managers. They also gave psychology classes to cadre, teaching them about methods of leadership, communication and motivating the workers. Marrera described their projects:

'Our work was in the factories, in the enterprises, working directly with the workers, observing their working conditions. We didn't apply tests. We did investigations. We didn't just go to where there were problems. In some places we investigated an area of the institution that was of interest. Also, a factory could request our help in understanding a situation, for example, between a leader and his subordinates. In some places they wanted to investigate the cause of rapid labour turnover. We assessed the material conditions, the colour, the climate, everything.'¹⁴³

During the visits they interviewed workers, carried out 'operative groups' – group discussions, and participated in management councils and trade union meetings at the production unit under investigation. The investigations had no time limit but usually took between one to three months, which meant living on site, eating in the cafeteria and sharing the facilities when those factories were outside of Havana. They observed everything from the floor level; including dawn or night-time work shifts.

¹⁴² Information from Marrera, interview.

¹⁴³ Marrera, interview.

After the period of investigation they produced a report evaluating the problems and making recommendations. Marrera described the kind of suggestions which included:

‘...better food, more attention to workers’ social and personal problems, ensuring work tools were in good condition, providing work clothes and boots for technical jobs, setting up a library and an area to relax. Most of our suggestions were material, but they were difficult to meet because the country’s economic conditions were bad. Sometimes the painting was too dark, so they had to repaint it, or put out flowers, find a radio, or create conditions for workers to sleep or for entertainment, to create social circles for employees and their families.’¹⁴⁴

The psychologists would return after submitting the recommendations to evaluate if the situation had improved. They could also be called to return by the production unit itself. Marrera said that Guevara was informed about all of their evaluations. She said: ‘Compañera Raquel [Hoffman] informed us that the ministry leaders were always very receptive to the suggestions that we made and would follow them wherever possible. Raquel participated in Management Council meetings and kept us informed.’¹⁴⁵

The Section for the Psychology of Social Work participated in the curriculum at Administrators’ School and the Directors’ School set up in MININD, giving classes in psychology. This was further formalised by the MININD’s *Manual for Factory Administrators*, which detailed management principles and different styles of management: practical, scientific, detailed, sectoral, generic, instructive and global.¹⁴⁶ One section of the *Manual*: ‘Characteristics Required in the Administrator’, illustrates that a layman understanding of psychology was generalised within MININD. For example, among the 32 personal qualities that the administrator should

¹⁴⁴ Marrera, interview.

¹⁴⁵ Marrera, interview.

¹⁴⁶ Ministerio de Industrias. *Manual Para Administradores de Fábricas*, 10 June 1964, sección 7, asunto 2, página 1-11. MININD, 1 June 1964.

cultivate, it listed: 'have absolute control of your character, voice and gestures at every moment and especially during discussions or delicate situations...and always be sincere... Remember that all men, regardless of their educational level, have the innate ability to detect insincerity quickly and nothing so easily accounts for the loss of moral respect of others then to be categorised as insincere.'¹⁴⁷ If a leader's sincerity was doubted they would lose the ability to lead by example, a vital lever for increasing the consciousness of the masses.

Marrera claimed that not only did the worker-students enjoy the psychology lessons, but also the mass of workers accepted the psychology projects. It is important to recall that her experience in this field began in 1964 and the Revolution had begun a process of institutionalisation and most of those with a class conscious opposition to socialism had left the island. Marrera said: 'The working class in general always supported the initiatives of the Revolution. They saw it would bring a better future. They didn't have knowledge about creating socialism, but they realised that the Revolution was permanent, that their homes were theirs, they were treated better at work and everywhere, so consciousness was growing deeper every day.' Through her work Marrera never encountered any issues which she foresaw as potential obstacles to the construction of socialism. There were individuals who were not 'revolutionaries', she said, but the majority were committed to the Revolution and building socialism:

'At that time there were still internal counterrevolutionary elements. At any moment we would have take to the streets to demonstrate that we were prepared to defend the Revolution. 1961 was Playa Giron, 1962 the October missile crisis, then the struggle against bandits. Workers kept their militia uniform ready. There was immense tension over when we would be attacked again.'¹⁴⁸

The fervour to defend the country's sovereignty and the socialist Revolution which

¹⁴⁷ *Manual*, sección 6: asunto 1: pagina 1

¹⁴⁸ Marrera, interview.

had materially and spiritually improved the lives of the majority of workers, served to foster consciousness, commitment and sacrifice. This would have been reflected in the psychological studies of the period.

Major projects

*'Che made a lot of use of the instruments of psychology. But to arrive at measurements of the effect of consciousness on production is difficult.'*¹⁴⁹

In addition to the regular work of the Department of Psychology, several major projects were carried out under Guevara's MININD, and under Borrego in MINAZ after its creation in 1964. The first project in MININD was in 1963. All employees in the ministry building, around 1,000 filled in a questionnaire on the same day at the same time. Marrera's was still a student in the Faculty of Psychology, but she participated in the project with other second year students. She explained: 'It was a very full questionnaire including questions to measure workers' satisfaction, sense of purpose and work relationships. For example, they were asked to state the three most significant characteristics of their immediate boss and superior boss, their qualities and their deficiencies. It asked what needs they had, the quality of the food, and so on.'¹⁵⁰ Most questions were tick-boxes but others allowed open answers. The analysis was done by the psychologists at the University, not those in MININD.¹⁵¹

In setting up MINAZ in summer 1964, Borrego implemented the BFS and developed the psychology tools which Guevara had embedded as part of the system. In 1965, MINAZ and the Faculty of Psychology collaborated on a project to assess the morale of workers in the ministry. Borrego said: 'It was a laborious investigation of great scientific value from the sociological perspective, in which dozens of students and various professors of the university faculty participated. In the parameters of measurement in the inquiry was found: the standing, prestige, recognition and

¹⁴⁹ Borrego, interview, 16 November 2004.

¹⁵⁰ Marrera, interview.

¹⁵¹ It has not been possible to obtain the results or conclusions of that analysis. Marrera did not recall whether there were any overtly political or ideological questions.

popularity of all the leaders of the institution in the eyes of its workers.¹⁵² This collaboration was repeated and extended in 1967 when a similar investigation was carried out involving every worker in MINAZ. Given the scale of the project, students from the Faculty of Psychology were joined by others from the philosophy and history faculties who went to every sugar mill and all other entities in the sugar industry throughout the island with questionnaires to assess the state of consciousness and attitudes all workers, from cane cutters to engineers and architects in the mills. Marrera was involved in the project, which took about one month to complete: 'It was a sector which I didn't know, and it was interesting to see how it worked. It was a very hard job, with tough conditions, very interesting work.'¹⁵³ Marrera participated in similar projects in sugar mills in Nuevitos in Camagüey. Borrego said that the results for the second investigation showed a marked improvement in terms of consciousness and work morale from the ministry workers who had been questioned two years previously.¹⁵⁴ By this time Guevara was no longer in Cuba, however the three-volume results of the investigation were sent to the Central Committee of the Cuban Communist Party, where Armando Hart, was particularly interested in the project.¹⁵⁵

While Borrego and other leaders continued to apply and develop the BFS and, more generally, Guevara's approach to socialist construction, others took advantage of Guevara's absence to dismantle much of the institutional apparatus he had created. According to Marrera, Hoffman was told that her services were no longer needed and she returned to Argentina. Marrera and her two colleagues were employed as psychologists, one in the Ministry of the Interior, one in the EC of Electrics and Marrera went to work in the central committee of the Cuban Communist Party in a Sociology Commission which had been set up. This was dissolved after one year and Marrera was transferred to work with her colleague in the electrical enterprise where

¹⁵² Borrego, *Camino*, 220. Vice Minister Jesús Suárez Gayol came out as the most popular leader. In 1966 he died in Bolivia as part of Guevara's guerrilla *foco* there.

¹⁵³ Marrera, interview.

¹⁵⁴ Borrego, interview, 23 November 2004.

¹⁵⁵ Hart told me that he did not have the results of the investigation, so I have not been able to get access to them. Borrego himself did not keep a copy.

she remained for the next 24 years.¹⁵⁶ The social psychology of work, along with psychology of all kinds had been institutionalised in Cuba. Guevara's contribution lay, particularly, in demonstrating how this tool could be applied to production. The premise for doing so was an understanding that human beings were at the centre of the productive system under socialism. The aim was to accelerate their development.

Plotkin observed that: 'Since the 1960s, psychoanalysis has had a deep impact on Argentine culture, particularly in Buenos Aires.'¹⁵⁷ By the start of that decade, under Guevara's management, psychology was also making its mark in revolutionary Cuba. Like much of the apparatus created by Guevara as part of his approach to socialist construction, psychology was underexploited following his departure from Cuba in 1965. Today, however, it is applied at all levels of Cuban society. In the 1980s new projects emerged to study the link between consciousness and production using psychology tools. Set up in October 1983 the Centre for Psychological and Sociological Research carried out projects to assess the relationship between workers' values, their sense of belonging and ownership of Cuban society. It would be an exaggeration to link the study and application of psychology in contemporary Cuba directly with MININD's apparatus in the early 1960s. However, the impulse and impetus which Guevara gave to psychology, although almost unknown, is unquestionable and formed an integral aspect of his comprehensive economic management system.

CONCLUSION

'Without being petulant, I think we can already say that for the first time in the world we have established a Marxist, socialist system, that is congruent, or approximately congruent, with one that puts man at the

¹⁵⁶ Marrera, interview.

¹⁵⁷ Plotkin, *Psychoanalysis*, 45.

*centre, that speaks about the individual, that speaks about man and his importance as the essential factor in the Revolution.*¹⁵⁸

The discussion about the Great Debate in chapter four of the thesis demonstrated that Guevara's ideas about consciousness were not idealist but were integrally linked to his scientific, Marxist analysis of the operation of the law of value. This chapter has illustrated the policies formulated within MININD as part of Guevara's BFS in order to affect consciousness in the transition to socialism. It has also discussed how he institutionalised the tools of psychology to access, and impact upon the consciousness of individuals.

Guevara's conception of consciousness, as social conscience, meant a commitment to the social and economic justice aims of the Revolution. It meant the conscious integration and participation in the project of socialist transition. Guevara's concern for consciousness began with his interest in philosophy, a concern for the human condition, which was evident through his choice of a medical career and in his observations about the social conditions he experienced on his travels through Latin America in the 1950s. Guevara's vision of history and social development was human centred. Like Marx he was interested not only in the historical development of modes of production, but also of the changing conditions of human beings as the key to production. This spurred his interest in the relationship between production and consciousness. Under the capitalist mode of production, human consciousness was characterised by alienation and antagonism: alienation from production as the product of man's impact on nature, and antagonism as class division, the relationships of production which divided society into the exploiter and the exploited. For Guevara, the challenge was to replace alienation and antagonism with integration and solidarity, developing a collective attitude to production and the concept of work as a social duty. As consciousness developed and workers took increasing control of production, work would become a social pleasure. Workers would value increases in production and productivity, not in terms of personal gain, but as increasing the benefits for society. Guevara criticised the lack of emphasis on

¹⁵⁸ Guevara, *Bimestrales*, December 1964, 561-2.

consciousness and education in existing socialism, arguing that new attitudes and values must be created simultaneously with the productive forces.

Most important is the fact that Guevara was in a position to concretise these ideas by formulating policies as Minister of Industries. The process was one of searching and experimentation. Ideas were developed in a dynamic environment, often emerging spontaneously from workers and managers devising ad hoc solutions to concrete problems which were then institutionalised, as has been demonstrated in the case of voluntary labour. The key to raising productivity and efficiency was in the incentive system. In addition to material incentives which Guevara deemed as a necessary evil, were moral incentives, particularly socialist emulation and voluntary labour. The Rehabilitation Centre at Guanahacabibes was an example of a moral disincentive and San Miguel de Los Baños was affirmation in the need to care for the human beings on whom production depended.

Psychology was a tool for measuring consciousness at the level of the individual. It was also a mechanism for evaluating their ability to cope with the stress of important responsibilities and to lead by their own example. This was particularly important given the scarcity of personnel with management abilities. Psychology had a pedagogical function, assisting individuals to become better leaders, improving the link between managers and workers, improving workers productivity by improving their conditions and sense of ownership of the means of production. Additionally, the imposition of psychology assessments could also serve as a safeguard against saboteurs. Both consciousness and psychology, elements which Guevara embedded in MININD as part of the BFS, remain vitally important in today in Cuba.

PART FOUR

Conclusions

Prologue

*'Che had accepted his role in the Ministry of Industries to work with Fidel until the Revolution was established and organised. He covered this stage brilliantly but after that he went to fight in other countries because his vocation was to combat what he had seen in America, the situation of the miners and the indigenous, and with the blacks in Africa, not to stay here in comfort. Che was an internationalist. He was not a revolutionary because he wanted to be a minister, but to fight for the poor.'*¹

In April 1965, Guevara left Cuba to lead a secret mission of Cuban military assistance to the guerrilla struggle in the Congo. The timing and motivation for Guevara's departure have been the source of much speculation. It was made clear by everyone interviewed for this thesis that Guevara had premised his involvement in the Cuban revolutionary struggle on the condition that he would leave following victory. After 1959, he frequently spoke of his intention to leave and continue the revolutionary struggle elsewhere insisting that: 'I will not die as a bureaucrat. I will die fighting in the mountains.'² In 1962 Guevara's *compañeros* from the Sierra Maestra sensed he was preparing to leave. In 1963, Guevara sent Juan Alberto Castellaños, among others, to Argentina to prepare conditions for his arrival with the intention of initiating a guerrilla struggle in concert with the urban movement.³ It was another two years before Guevara left Cuba and it is arguable that he postponed his departure, not just to wait until conditions were adequate for combat overseas, but also until he considered the Budgetary Finance System (BFS) to be adequately institutionalised and able to be sustained without his physical presence in Cuba. However it is evaluated, Guevara's decision to renounce his position in the Cuban

¹ Edison Velazquez, interview, 21 January 2006.

² Guevara cited by Tirso Sáenz, interview, 7 January 2005.

³ Alberto Castañellos, interview, 1 March 2006 & Harry Villegas, interview, 22 March 2006.

government and return to armed struggle overseas is perhaps less striking than the fact that he had stayed so long as part of the Revolution's leadership.

At the time of his departure, Guevara was convinced that the BFS constituted a major advance in socialist political economy. The Ministry of Industries (MININD) was a huge apparatus and it had already begun to be divided. In June 1964 the Consolidated Enterprise (EC) of Sugar was split off to create the Ministry of Sugar (MINAZ). Over the next three years the food stuffs branch passed into the jurisdiction of the National Institute of Agrarian Reform (INRA), the Vice Ministry of Light Industry became the Ministry of Light Industry and a new Ministry of Electricity was created. By 1967, the remaining apparatus of the MININD became the Ministry of Basic Industry. Orlando Borrego, Guevara's deputy since 1959, said that Guevara had advised his Management colleagues that MININD should be divided in this way. Guevara hoped that other ministries would adopt the BFS although he was aware that members of the government did not approve of his system. Borrego, who implemented the BFS in MINAZ, said:

'I think that if Che had lived many other ministries that came of out MININD would have applied the BFS. But it lacked its strongest defender. The BFS was novel and audacious in socialism. There were more conservative people who wanted to follow the experience of Europe.'⁴

After Guevara left the island, MININD's First Vice Minister, Arturo Guzmán Pascual substituted him as minister. From October 1967, after Castro read Guevara's farewell letter making his departure official, Joel Doménech Benitez became the new minister. Domenech dismantled many of Guevara's structures and control mechanisms.⁵ To cite one example, the Department of Scientific-Technical Information was closed as part of the Campaign Against Bureaucracy, accused of having 'too many papers'. Maria Teresa Sánchez, who had been its director, pointed

⁴ Borrego, interview, 2 April 2006.

⁵ There is no record of these events.

out the illogicality of the action, given that they had no computers: 'We had to work with papers and sometimes we didn't even have paper!'⁶ Also in 1965, the Ministry of Finance, which Guevara argued could replace the National Bank as the key financial institution under socialism, was dissolved. While all this may have appeared as a rejection of Guevara's BFS, paradoxically, in 1967, the Central Planning Board (JUCEPLAN) instructed all Cuban ministries to implement a new Registry System which President Osvaldo Dorticos apparently believed was consistent with Guevara's ideas on economic management. In reality, it abandoned vital key premises of Guevara's system; cost control as a means to increase productivity and efficiency.

The Registry System eliminated cost accounting. From April 1967, all charges and payments between ministries and enterprises were abolished and replaced with a system of 'economic records'.⁷ The correlation between work effort and remuneration was severed, and the last forms of taxation abolished. Inevitably, this created numerous problems. The annual budgets could not be monitored or controlled, which partly explains why the mass mobilisation for the campaign to harvest ten million tons of sugar was so detrimental to all other sectors of the Cuban economy; the lack of control mechanisms and records meant there was no awareness of the disruption which was being caused.

As Minister of Transport, Faure Chómon Mediavilla was instructed by JUCEPLAN to implement the Registry System:

'Everyone made their own interpretation of how to apply the basic elements of the System. Many interpreted it incorrectly deciding that they could produce without concern for costs.... At that time we did not fully understand Che's ideas and the compañeros who proposed the System

⁶ Maria Teresa Sánchez, interview, 8 March 2006.

⁷ Fidel Castro Ruz, *Report of the Central Committee of the CPC to the First Congress*, La Habana: Department of Revolutionary Orientation, 1977, 149-152. Apart from Castro's passing comments, little had been written about this economic management system, the details of its structure and mechanisms. Orlando Borrego will shortly publish a review of the seven economic management systems implemented in Cuba since 1959, including the Registry System.

did not prepare specialists in the productive and services sectors of the country. It was pure idealism in which, logically, Che's absence was felt.'⁸

Alfredo González Gutiérrez, a member of JUCEPLAN at that time, said that to associate the Registry System with Guevara: 'is a great historical injustice, because if there was someone in this country who was concerned for costs and for efficiency it was Che.'⁹ The resultant lack of economic control and the consequent fall in production and productivity, lead ultimately to the adoption of the Soviet Planning and Management System in 1976.

Whilst the Cubans struggled to achieve a uniform economic management system, Guevara continued to develop his theoretical positions whilst overseas, making his most important contribution to socialist political economy from 1965-66. Hence Part Four of the thesis serves as a concluding part –both Guevara's conclusions and those of the thesis. Chapter 11 details Guevara's preliminary notes for a critique of the Soviet Manual of Political Economy. Written after six years of experience working in the Cuban government, it shows how Guevara concluded that capitalism would return to the socialist bloc and the analytical consistency which led him to predict this. Chapter 12 concludes the thesis analysis of his contribution to socialist political economy and economic management in Cuba.

⁸ Faure Chómon, interview, 16 February 2005.

⁹ Alfredo González Gutiérrez, interview, 1 February 2006.

CHAPTER 11

Critique of the Soviet Manual of Political Economy

*'After the Congo, Che began a critique of the Soviet Manual of Political Economy and predicted 20 years ahead that the Soviet Union was going to return to capitalism. This demonstrates his genius; without being an economic scientist, or a brilliant economist he was capable of getting to the root of the problem. He based himself on Marxist theory. What the USSR was doing was taking them away from Marx and Engels' conceptions about the construction of socialism. He was capable of penetrating the issue because he was so studious.'*¹

Guevara's critique of the *Soviet Manual of Political Economy* is extremely significant for this thesis because it demonstrates that by 1966 Guevara had sufficient conviction in his theory of socialist transition and confidence in his alternative economic management system to initiate a project which would challenge the status of the *Manual* and the position of the Soviet Union as guiding light of the socialist world. If Guevara had completed his alternative manual or seminal work on socialist political economy, it would have been by implication a major challenge to Soviet dominance and would have offered an alternative model of transition for socialist countries and emerging revolutions.

In addition, the notes he wrote to initiate the project permit an assessment of how Guevara's ideas had changed or developed following his practical experience as Minister of Industries. Examination reveals that there is remarkable consistency between the arguments Guevara developed once he had left Cuba and those theoretical positions of his which have already been examined in this thesis, and which were expounded in the Great Debate and concretised in the Budgetary Finance

¹ Edison Velázquez, interview, 21 January 2006.

System (BFS). Rather than changing, his analysis deepened and was strengthened. This is a significant discovery which further refutes the prevailing myth that Guevara left Cuba because of the relative failure of his economic policies.

Guevara's theoretical analysis had been publicly disseminated during the Great Debate while the experimental formulation of the BFS was also open to scrutiny and emulation in Cuba and outside. Guevara was granted free reign to develop his ideas and practice within MININD, however, there was also clearly a need for sensitivity to the *real politik* of relations between the USSR and Cuba. While Guevara publicly opposed the Soviet economic management system, he did not publicly articulate his conviction that the AFS threatened to reintroduce capitalism in the socialist countries. Guevara recognised that he could not speak as an individual; his total integration into the Revolution's leadership, the autonomy granted to him to develop his ideas and practice in MININD, and the fact that he represented Cuba throughout the world, meant that his own analysis could be taken as a Cuban government position. His scientific methodology and candour compelled him to analyse and search for solutions, but he was also careful not to jeopardise fraternal relations, and more importantly, the enormous financial and important political assistance which Cuba received from the Soviet bloc.

Guevara was cognisant of the value of Soviet assistance and had great respect for the feats of USSR. It is vitally important to understand that his criticisms were intended as constructive. Guevara believed that by carrying out a scientific analysis of the AFS he would be able incontrovertibly to highlight the dangers inherent in an 'hybrid' system: socialism with capitalist mechanisms. He hoped to convince the other socialist countries to reverse the prevailing trend towards market socialism. He compared them to an aeroplane that was lost and instead of returning to find the correct path, it continues on its journey.² Orlando Borrego, his closest collaborator from 1959-1965, testified that Guevara hoped that his theoretical critique, backed up

² Ernesto Guevara, 'Reuniones Bimestrales', 5 December 1964, in Ministerio de Azúcar. *El Che en la Revolución Cubana: Ministerio de Industrias*, tomo VI, La Habana: MINAZ, 1966, 570.

by the practical experiences of implementing the BFS in Cuba, would convince the socialist countries to correct their mistakes. The work which Guevara embarked upon with his critique of the Soviet *Manual* would consolidate these efforts.

In some ways what most irritated Guevara was the absence of a forum for an international debate on the political economy of socialist transition. The Sino-Soviet split formed a vociferous backdrop which reverberated through communist parties around the world, particularly in Latin American, compounded existing divisions between so-called Trotskyists and Stalinists. Within Cuba, debate and comparative experimentation had been encouraged. But outside Cuba, Guevara's critical analysis had led to accusations that he was variously a revisionist, a Trotskyist and a Maoist, something which he regarded as dangerous politicking, machinations aimed to disrupt the tenuous fraternity of socialist countries and censure debate. Guevara told MININD directors one of the most annoying sources of these accusations was from Trotskyists claiming there were aspects of his analysis which reflected Trotsky's criticisms. Guevara distanced himself from Trotskyism:

'There are some useful things that can be taken from Trotsky's ideas. I believe that the main things on which Trotsky based himself were erroneous and that later his behaviour was wrong and even obscure in the final period. The Trotskyists have contributed nothing to the revolutionary movement anywhere and where they did most, in Peru, they ultimately failed because their methods were bad. Comrade Hugo Blanco was personally a man of great sacrifice, but because of a set of erroneous ideas they necessarily failed.'³

On the other hand, Guevara admitted that: 'In many aspects I have expressed opinions that could be closer to the Chinese: guerrilla warfare, people's war, in development of all these things, voluntary labour, to be against material incentives as a direct lever, a whole set of things which the Chinese also raise...'⁴ Consequently,

³ Guevara, *Bimestrales*, December 1964, 566. Blanco was a Trotskyist leader in Peru.

⁴ Guevara, *Bimestrales*, December 1964, 567.

explained Guevara, he was accused of factionalism, in an environment in which different interpretations had become a bitter and violent fight, which refused to recognise different opinions: 'I no longer discuss the budgetary finance system [with the Soviets]. What's more, I represent the government when I travel and I am very disciplined and strictly represent the opinion of the government. So they would have to call the government Trotskyist, which is impossible.'⁵ The political situation was indeed delicate.

For Guevara it was imperative to initiate a serious study of the political economy of the transition to socialism, without the political machinations: 'It is impossible to destroy opinions with beatings, that is precisely what kills development, the free development of intelligence.'⁶ The more people involved in collective debate the more comprehensive and solid would be the theory which emerged. He appealed to MININD directors to take up this challenge: 'Then there is a need for help, you should help more, think more, collaborate, read all the fundamental texts we have in our reach.'⁷ Study and analysis were essential to facilitate the resurgence of creative and dialectical Marxism to shatter the dogmatism and mechanistic imposition in the USSR, which had turned the *Manual*, not Marx's *Capital*, into the Bible.⁸ He explained that: 'The theory is failing because they have forgotten that Marx and the whole epoch before them existed and they base themselves on nothing more than Lenin; we should say, on one part of Lenin, from 1920 onwards, which are just a few of his years, because Lenin lived many years and studied a great deal.'⁹ The reference to Lenin from 1920 onwards is a reference to the implementation of the New Economic Policy (NEP) which was introduced as a practical solution to concrete problems and openly articulated by Lenin to be a major concession to capitalist mechanisms and a step backwards for socialist construction.

⁵ Guevara, *Bimestrales*, December 1964, 567.

⁶ Guevara, *Bimestrales*, December 1964, 566.

⁷ Guevara, *Bimestrales*, December 1964, 567.

⁸ Guevara, *Bimestrales*, December 1964, 566.

⁹ Guevara, *Bimestrales*, December 1964, 569.

Guevara outlined his ideas in a letter to Fidel Castro which serves to identify his concerns and his focus for the critique on which he later embarked. The relevant part of the letter the letter is paraphrased below:¹⁰

In the *Critique of the Gotha Programme*, Marx described a period of socialist transition under which commodity categories are suppressed. Later Lenin contributed his theory of unequal development, and the weakest link, and the proof of this theory in the Soviet Union imposed a new stage: the period of transition to socialism. The Soviets and the Czechs claim to have passed this first stage. Objectively this is not true because of the existence of private ownership. The important point is that the political economy of this period has not been studied and facts about Soviet society have been presumed as laws of socialist society. When Lenin, forced by circumstances, introduced the NEP it meant the return of old capitalist relations of production. There was an intermediary period in which Lenin had not yet retracted the theoretical conceptions that had guided his action until the Revolution, but from 1921 onwards Lenin's actions led to the NEP that created relations of production that configured what he called state capitalism, but in reality in respect to economic relations could also be called pre-monopoly capitalism. In the last period of Lenin's life he observed a great tension; he criticised payments and profits made between enterprises. It is probably that if Lenin had lived he would have promptly introduced changes to the relations established by the NEP.

The entire legal-economic scaffolding of Soviet society originates from the NEP, maintaining old capitalist relations and capitalist categories: commodity, profit, bank interest, material incentives. But the relations are from pre-monopoly capitalism, lacking the concentration of capital and management techniques of today's big trusts and without the competition of capitalism to foster development. Individual material interest, an excellent arm under capitalism, had limited effectiveness as a lever, because exploitation is not permitted. Man does not develop his productive capacities or his consciousness as a constructor of a new society. The law of value does not operate freely because of the absence of a free market. Its revolutionising effect on production is lost. Soviet technology is stagnant relative to the US in most economic sectors because they have not implemented new laws where there is no market. With no substitute for competition, technology has stopped driving social development. The exception is in defence where the norms of profit do not operate. The Soviets lacks the integration which exists in capitalist countries between the defence sector and production sector, where

¹⁰ Published for the first time in February 2006, in Ernesto Che Guevara, *Apuntes Críticos a la Economía Política*, Centro de Estudios Che Guevara, La Habana: Ciencias Sociales, 2006.

military technology gains are incorporated into the civilian production, significantly increasing the quality of consumption goods.

These mistakes, excusable in the USSR, the first country to experiment with socialism; have been transplanted to different and more developed countries, leading to a dead end and provoking reactions. The first to revolt was Yugoslavia, then Poland, now Germany and Czechoslovakia. They turn against the system without searching for the source of the rot. They blamed bureaucracy, excessive centralisation and the enterprises struggle for independence, similarly to capitalists within the bourgeois state, as the law of value increasingly becomes the measure of efficiency and factories are closed for inefficiency and workers migrate to Europe.

Our system [the BFS] combines two main lines of thought that should be followed to reach communism: consciousness and technology. The possibility of reaching communism cannot be measured in income per capita. Communism is a phenomenon of consciousness. Development in production means increasing use of technology, which signals the increasing concentration of fixed capital. This phenomenon is produced by capitalist development, in imperialism, which contains the technological seeds of socialism much more than the AFS – a system inherited from a form of capitalism that has been surpassed, but which they have taken as a model for socialist development. Our system aspires to take the most advanced capitalist techniques, productive technology and organisational structure, and therefore it tends towards centralisation. We try to eliminate capitalist categories. In existing socialism, when they have noted the serious technological failings, they have looked around and discovered capitalism, not its techniques. The gap in our system is in achieving the integration of man with his work so that it is no longer necessary to use, what we call, material disincentives; how to make each worker feel the vital necessity to help their revolution and at the same time feel that work is a pleasure, as we leaders feel.

Those who criticise the BFS conclude that the lack of worker enthusiasm is due to the lack of material incentives. Their solution is for workers to manage the factories and be monetarily responsible, have incentives and disincentives in accordance with the management. Clearly some worker has to lead the production unit as a representative of them all, but not in antagonism with the state. Centralised planning must rationally use all elements of production and cannot depend on one workers' assembly or on the opinion of one worker. However, practice has taught us that one technician can have more effect on production than all other workers, or one management cadre can change a factory by enthusing and involving all the workers. We do not yet fully understand this process, it needs to be studied. The answer has to be closely linked with the political

economy of this period and the treatment of these questions should be integral and coherent with political economy.¹¹

Written in April 1965, Guevara's letter to Castro appears as a leaving speech, explaining why he had felt it necessary to develop the BFS: its aims, an evaluation of its strengths and weaknesses, a call to others to keep up the good work. That same month, Guevara left Cuba to engage in a secret mission of Cuban military assistance to the guerrilla struggle in the Congo. The guerrillas were defeated, but Guevara remained in hiding in Tanzania and Prague in the Czech Republic between 1965 and 1966 where he took up the challenge of expounded a comprehensive critique of the political economy of socialist transition. He began planning an ambitious and comprehensive work, to begin with a biography of Marx and Engels, which he completed, an explanation of their method, followed by an overview of pre-capitalist, capitalist and imperialist modes of production. He then aimed to deal with the period of transition to socialism and finally the problems of socialism. The topic coverage was so comprehensive that, even given Guevara's talent for being concise, the completed work would have rivalled the *Soviet Manual of Political Economy* in size and scope.

In preparation for this work Guevara took notes on the Soviet *Manual*. This practice was consistent with the methodological approach to study adopted since his teenage.¹² Many works of theory have taken the form of a critique of existing ideas, including Marx's *Capital*. Guevara's critique applied his theoretical positions expounded in the Great Debate to the *Manual* and expanded on themes dealt with fleetingly in the MININD bimonthly meetings. However, it is vital to remember that these notes were not written for publication, nor brought together as text. They were comments written in response to specific paragraphs of the *Manual*: notes to himself, including indications of areas for further study.¹³ It would be disingenuous to present these private commentaries as a comprehensive critique, rather than the preliminary sketch of a more long-term study. Guevara demonstrates awareness of

¹¹ Guevara, *Apuntes Criticos a la Economía Política*, Centro de Estudios Che Guevara & Ocean Press. La Habana: Ciencias Sociales, 2006, 7-17

¹² See chapter 10 for details.

¹³ Guevara's notes directed him to the work of Paul Sweezy, Lin Piao and Xhinuy.

the relative historicity of both the *Manual* and his own critique. Readers of the notes should do likewise.

What stands out is that after six years of leading industry in Cuba, and four years of developing and implementing the BFS, Guevara's theoretical positions had not changed, but had become sharper and more profound. His analysis of the operation of the law of value under socialism, the role of money, finance and banking under socialism and the use of incentives, expounded in the Great Debate, were reemphasised in his critique of the Soviet *Manual*. He continuously highlighted the deficiencies of the Soviet theory and pointed out new areas where investigation was imperative.

CRITIQUE OF THE SOVIET MANUAL OF POLITICAL ECONOMY

Guevara's notes begin with an introduction explaining the need for such a critique. This is paraphrased below:

Marx's *Capital* is a monumental theoretical work, which serves revolutionaries by explaining the mechanisms of the capitalist system and the internal logic which will lead to its own destruction. Some of Marx and Engels' predictions have not occurred for various reasons. Lenin analysed the new imperialist form of capitalism and saw the possibility of breaking the weakest link in the imperialist chain. While the founders of Marxism left behind many theoretical works, since their death few new contributions were made leaving only the works of Stalin and Mao Tse-Tung to testify to the creative power of Marxism. In his last years, Stalin was worried about the lack of theory and ordered a *Manual* about the political economy of socialism to be written in a form accessible to the masses. We have so many differences with the *Manual* that we have been through it with as much scientific rigor and honesty as possible, which is so vital because this study criticises the USSR, a position which serves opportunists who attack it from the extreme left to the benefit of the reactionaries. We will not hide our opinions for tactical reasons, but our conclusions will have logical rigor and we will propose solutions.

The intransigent dogmatism of Marxism has been succeeded by inconsistent pragmatism. With daring, respect, admiration and revolutionary motives we say that Lenin is the ultimate culprit. Our thesis

is that the changes produced by the NEP have become entrenched in the USSR. The capitalist superstructure influences the relations of production and the hybrid system [socialism with capitalist elements] provokes conflicts which have been resolved in favour of the superstructure. It is returning to capitalism.

This work is a cry out from underdevelopment. The Cuban Revolution introduced the first socialist adventure to take place in a small, isolated country without big markets.

Some will see this book as a rabid anti-communism disguised as theoretical argument. However, many will feel the breath of new ideas, explained and given backbone. This book is written for them, and Cuban students who go through the painful process of learning 'eternal truths' in publications, mainly from the USSR. For those who distrust this book out of loyalty to the socialist countries, we warn that the inability of bourgeois economics to criticise itself, pointed out by Marx at the beginning of *Capital*, is seen today in the economic science of Marxism. Humanity faces many shocks before final liberation, but we cannot arrive there without a radical change in the strategy of the first most important socialist powers.¹⁴

As with the previous chapter on the Great Debate, the intention here is to explore Guevara's analysis. The thesis contribution is in the selection, interpretation and thematic presentation of the critical notes. For clarity and to avoid simply reproducing the notes as they were annotated, the chapter has been organised into five themes: capitalism and imperialism, the Kolkhoz agricultural cooperatives in the USSR, socialism, class relations and international relations. A summary of Guevara's critical analysis of each theme follows.

CAPITALISM AND IMPERIALISM

Guevara complained that the *Manual* adopted a classical Marxist conception of class relations between the bourgeoisie and the working class, without considering the effects of imperialism. While the *Manual* argued that capitalists attack the standard

¹⁴ Guevara, *Apuntes*, 25-28 & Orlando Borrego Díaz, *El Camino del Fuego*, La Habana: Imagen Contemporánea, 2001, 381-383.

of living of the working class who therefore resist, Guevara argued that in the imperialist countries:

‘...the tendency of modern imperialism is to share with the workers the crumbs of their exploitation of other peoples. On the other hand, the tendency to increase production demands an increase in consumption, that is only achieved in a stable form by making new articles form an essential part of the workers life, in that they form part of the formation of the value of labour power (radio, television, cinema, domestic equipment, etc).’¹⁵

Guevara repeated this point in relation to salaries, stating that Marx’s analysis of the tendency for salaries to fall is controversial: ‘It seem to me that this needs to be studied in three parts: the tendency of capitalism to lower the average salary; the need to increase the sale of products that tends to increase the value of labour power; imperialism as a world system that tends to pauperise countries while sharing out crumbs to its working class.’¹⁶ The latter explains why: ‘the mass of workers in the imperialist countries have stopped being the vanguard of the world revolution.’¹⁷ Guevara’s principle concern here was the effect of imperialism on the working class in advanced capitalist countries. He pointed out that a high proportion of those workers achieve a higher standard of living at the expense of the poor in the exploited nations. He touches on the contentious issue of the dichotomy between the need to increase the consumption levels of sections of the working class and the general need to decrease the value of labour power globally.

Guevara is not just referring to the labour aristocracy, but to the whole working class within the imperialist countries who benefit from the imperialist exploitation and the technological progress of monopoly capitalism. In response to the Soviet *Manual*’s assertion that capitalist machinery increases the intensity of work without increasing pay, Guevara adds that the tendency of monopoly capitalism is towards automated

¹⁵ Guevara, *Apuntes*, 59.

¹⁶ Guevara, *Apuntes*, 64.

¹⁷ Guevara, *Apuntes*, 67.

production, where the machinery imposes the rhythm and there can be little variation to the work norm: 'The tendency of modern production makes man's work less physically demanding.'¹⁸

Chapter 14 of the *Manual* deals with economic crises, claiming that capitalist crises demonstrate that the development of the productive forces of capitalism have surpassed bourgeois relations of production, which obstruct their further development. 'How is it possible to tell the story of crises going back two hundred years by making a statement of this type?' questioned Guevara, adding that: 'there is a crisis of growth that leads to the monopolistic concentration of capitals. The problem is that the meaning of the crisis has not been adequately studied by Marx and they have continued with the generalities he expounded.'¹⁹

Guevara also pointed out that the result of the arms race had not been scientifically analysed, nor its relation to crises. Following the *Manual's* assertion that the arms race leads to an increase in workers' exploitation and monopoly profits, he stated that it decreases unemployment and creates a relative prosperity: 'I don't understand the mechanism well but it must be a short term phenomenon that inevitably leads to war and crisis. It is said that war prevents the crisis. We need to study cycles to see if the war does not prevent the crisis.'²⁰

Finally Guevara cautions against Lenin's characterisation of imperialism as capitalism which was dying, not just monopolistic and parasitic. He said: 'a middle aged man cannot undergo more physiological changes, but he is not dying. The capitalist system reaches its total maturity with imperialism, even then it has not fully exploited all of its possibilities in the current moment and it has great vitality. It is more precise to say "mature" or express that it has arrived at the limits of its ability to develop... we are not so close to the definitive day of revolution.'²¹

¹⁸ Guevara, *Apuntes*, 63.

¹⁹ Guevara, *Apuntes*, 77.

²⁰ Guevara, *Apuntes*, 80.

²¹ Guevara, *Apuntes*, 83-4.

Guevara fully appreciated the enormity of the productive, military and political strength of capitalism. This reality could not be ignored in the aspirations to socialist transition. The power of the capitalist world provides the context to the struggle for socialism and it was recognition of this that made Guevara so adamant that transition from the capitalism to socialism was a process which had to be both conscious and violently forced.

KOLKHOZ

The Kolkhoz was a form of collective farm established in the late 1920s in the Soviet Union, in which members of the farm, kolkhoznics were paid a share of the farm's product and profit according to the number of workdays they had invested. Kolkhoznics were entitled to hold an acre of private land and some animals, the product of which they owned privately.²²

Guevara has two principal points of contention in relation to the *Manual's* formulation about the Kolkhoz. First, he insisted that the Kolkhoz system is: 'characteristic of the USSR, not of socialism',²³ complaining that the *Manual*: 'regularly confuses the notion of socialism with what occurs in the USSR.'²⁴ Second, he argued that cooperatives are not a socialist form of ownership and that they impose a superstructure with capitalist property relations and economic levers.

The *Manual* states that the Kolkhoz are free from exploitation and antagonistic contradictions. Guevara refers to denunciations in the Soviet press of a Kolkhoz which contracted manpower for specific harvests, and questioned: 'whether this is considered to be an isolated case or if you can maintain this occasional exploitation of manpower within a socialist regime?' For Guevara the Kolkhoz structure itself created antagonism in the relations of production, because: 'the Kolkhoz system

²² It is beyond the scope of this chapter to detail the history and significance of the Kolkhoz farms.

²³ Guevara, *Apuntes*, 166.

²⁴ Guevara, *Apuntes*, 140.

allows a form of property that necessarily clashes with the established regime, and even with its own Kolkhoz organisation, as the peasant works for himself and he will try to deduct from the collective for his own benefit.²⁵

Guevara cited Lenin's statement that the peasants generate capitalism.²⁶ The *Manual* itself quotes Lenin that small production generates capitalism and the formation of a bourgeoisie, constantly and spontaneously.²⁷ However, Guevara concluded that the *Manual* is not able to deny that the cooperatives generate capitalism: 'Although it has collective tendencies, it is a collective in contradiction to the big collective. If this is not a step towards more advanced forms, a capitalist superstructure will develop, and bring about contradictions within society.'²⁸ The 'big collective' is the nation and reflects Guevara's view that under socialism, the means of production in different enterprises and sectors should be considered as parts of one big factory. There can be no commodity exchange between them, as there is no transferral of ownership, thus the law of value is undermined.

The *Manual* quotes Lenin that: 'The regime of cooperative cultivation under social ownership of the means of production, under the triumph of proletariat over the bourgeoisie, is the socialist regime.'²⁹

Guevara stated that this was one of the greatest mistakes of socialism: 'To begin with a semantic question...what is a cooperative? If it is considered as a grouping of producers, owners of their means of production, it is an advance in contrast to capitalism. But in socialism it is a setback, as it places these groupings in opposition to society's ownership of the other means of production. In the USSR the land is social property but not the other means of production that belong to the Kolkhoz, not to mention the small kolkhoznic property which supply growing quantities of basic

²⁵ Guevara, *Apuntes*, 55.

²⁶ Guevara, *Apuntes*, 55.

²⁷ *Manual*, *Apuntes*, 57.

²⁸ Guevara, *Apuntes*, 104.

²⁹ Lenin, cited by *Manual*, *Apuntes*, 107.

foodstuffs and deepen the gap between the society and the kolkhoznics, if not financially, then ideologically.’³⁰

According to Guevara even if private property within the Kolkhoz was eliminated there is a contradiction between individual collective ownership and the social ownership of all the people.³¹ As evidence of this, the *Manual* outlines contradictions which arose between the Kolkhoz and the Machine and Tractor Stations (MTS), which lent equipment to the cooperatives. As kolkhoznics monetary incomes increased they were able to purchase tractors and other agricultural machinery, which created pressure on the MTS to sell technical equipment to the Kolkhoz. The MTS were consequently reorganised as repair centres for the equipment.³² Guevara stated that: ‘this is a palpable example of the antagonistic contradictions that emerge between social property and that of the individual collective. The MTS could have had many vices of bureaucracy, but the superstructure imposed its solution: greater autonomy and more of its own wealth.’³³ The superstructure was the Kolkhoz.

The Kolkhoz had fixed salaries for cooperative workers whose employment was guaranteed. In addition they received monthly bonuses – in money or in kind – according to their work days contributed. For Guevara: ‘this, and the reasons pointed out as advantageous, indicates the backward character of the Kolkhoz system, a compromise solution by a state that constructed socialism alone and surrounded by dangers. The superstructure created gained strength with time.’³⁴ Guevara is extremely cognisant of the concrete conditions which made the formulation of the NEP and consequent economic management systems necessary. However, his concern is that these measures be openly understood to be concessions to those problems, not paradigms for socialist transition. Noting that the Kolkhoz has differential incomes according to their size and productivity, Guevara commented: ‘One has the right to ask them self, why? Is it essential? The answer is: no.’³⁵

³⁰ Guevara, *Apuntes*, 108.

³¹ Guevara, *Apuntes*, 168.

³² *Manual*, *Apuntes*, 168-9.

³³ Guevara, *Apuntes*, 169.

³⁴ Guevara, *Apuntes*, 170.

³⁵ Guevara, *Apuntes*, 171.

Guevara concluded that: 'it would be better to consider the Kolkhoz as a pre-socialist category, of the first period of transition',³⁶ insisting that 'cooperative ownership is not a socialist form.'³⁷

For Guevara, the major challenge of socialist transition was precisely: 'how to transform individualised collective property into social property.'³⁸ This was the crux of the problem and it was not being confronted in existing socialism. Without solving this contradiction, the class antagonism would remain, impeding the transition to communism, a classless society. The *Manual* describes the Kolkhoz peasants and the working class as two classes in socialist society with amicable relations, but different positions in social production. Guevara responded that: 'if the Kolkhoz peasants are considered as a separate class it is because of the type of property they have; property that should not be considered as a characteristic of socialism but rather of Soviet society.'³⁹ The *Manual* concluded that: 'the relations of production of the Kolkhoz cooperative form fully respond to the needs and the level of development of the current forces of production in the countryside. Not only have they not exhausted their possibilities, but they can serve for a long time during the development of the forces of production in agriculture.'⁴⁰ But Guevara believed that a confrontation between this collective form and social ownership of the means of production was inevitable, and he warned that: 'when they clash (and it could be in the not too distant future) with the superstructure, they will have the strength to demand more "freedom", that is to say to impose conditions; it is worth saying, to return to capitalist forms.'⁴¹

In addition to his theoretical arguments about contradictions in property relations, Guevara also contested the Soviet's claim to have a superior form of agricultural production to capitalism, the biggest and most mechanised in the world. 'North American productivity is higher, due to the investments carried out in agriculture', he

³⁶ Guevara, *Apuntes*, 116.

³⁷ Guevara, *Apuntes*, 119.

³⁸ Guevara, *Apuntes*, 180.

³⁹ Guevara, *Apuntes*, 182.

⁴⁰ *Manual*, *Apuntes*, 187.

⁴¹ Guevara, *Apuntes*, 187.

asserted adding that the Soviet's statement seemed like a mockery: 'after the enormous purchases of wheat, it is a joke or an attempt to cover up the truth with words.'⁴²

Guevara's position is clear; cooperative ownership and the Kolkhoz system generate a capitalistic superstructure which clashes with state ownership and socialist social-relations, increasingly imposing its own logic over society. The Kolkhoz system was progressive in relation to capitalist forms of ownership, but would also retard the development of socialist forms.

SOCIALISM

The *Manual* seemingly contradicted itself on the question of the parliamentary road to socialism in the capitalist countries, first stating that a socialist economy: 'cannot arise in the entrails of bourgeois society, based on private property' and then stating that 'there is the real possibility that, in one or another of the capitalist countries or those coming out of colonial domination, the working class could arrive at power peacefully, through parliament.'⁴³

Guevara was dismissive: 'Not even the Italians believe this song about parliament and they have no other god.'⁴⁴ For him, the transition from capitalism to socialism is never without struggle and he challenged the Soviets to prove the opposite.⁴⁵

With the development of socialism, claimed the *Manual*, a fundamental economic law of socialism emerges: Production is carried out to raise the material well being and cultural level of the workers, achieved by means of rapid and uninterrupted extension of industry and full application of advanced technology.⁴⁶ Guevara replied:

⁴² Guevara, *Apuntes*, 111. In 1963, the USSR was forced to purchase wheat at world market prices from the US because of a domestic production crisis.

⁴³ *Manual*, *Apuntes*, 96 & p98.

⁴⁴ Guevara, *Apuntes*, 98. Possibly a reference to Gramsci.

⁴⁵ Guevara, *Apuntes*, 90.

⁴⁶ *Manual*, *Apuntes*, 101.

‘For me, this is the weakest point of the so-called socialist political economy. If there was a fundamental law it would be of the moral order, placing itself at the head of the political programme of the proletarian government, but never economic. On the other hand, what would this fundamental economic law be, if it does exist? I believe that it does exist and that it should be considered to be planning as such. Planning should be understood as the first opportunity for humans to govern economic forces. This would mean that the fundamental economic law is that of interpreting and managing the economic laws of the period.’⁴⁷

The extracts selected by Guevara in his notes include nine economic laws of socialism, according to the *Manual*. Guevara contests each law, serving to undermine the scientific claims of the *Manual*, as follows:

Manual law 1: The necessary correspondence between relations of production and the forces of production.

Guevara: This contradicts the *Manual’s* statement that countries without fully developed capitalism can reach socialism.⁴⁸

Manual law 2: Uninterrupted production – because production is free from crisis.

Guevara: This is idealist and recent problems in Eastern Europe and the wheat crisis demonstrate that there can be interruptions in production. This law is based on Stalin’s claims that demand is below supply in the construction period. Khrushchev refuted this and life has proved him right, but it was the errors in production which led to crises and stagnation in production.⁴⁹

Manual law 3: Harmonic (proportional) development of national economy.

Guevara: Correct, but vague, and does not define harmonic development. Armaments conflict with laws of satisfaction of consumption goods and there are

⁴⁷ Guevara, *Apuntes*, 102.

⁴⁸ Guevara, *Apuntes*, 99-100.

⁴⁹ Guevara, *Apuntes*, 89 & 179.

differences between autarkic countries and those using the proper international division of labour. This law is simply an element of planned development.⁵⁰

Manual law 4: Constantly rising worker productivity.

Guevara: This is an outrage. It is the tendency that has driven capitalism for centuries.⁵¹ To set out to increase productivity by individual incentives is to fall lower than the capitalists. They do increase exploitation in this way, but it is the technology that allows the great leaps in quality in relation to productivity.⁵²

Manual law 5: Socialist accumulation demands systematic investment of part of national income in the increase of production funds.

Guevara: Another capitalist law dressed up differently.⁵³ Cannot put goals of 'bread and onions' to reach communism; a determined (elastic) level of development of the productive forces with the new level of consciousness of the masses will reach communism.⁵⁴

Manual law 6: Distribution (remuneration) according to work invested.

Guevara: Vague and inexact in relation to today's reality and begs the questions, how much work does a major general, a teacher, a minister or a worker invest? Lenin made a proposal in *State and Revolution*, to equalise the salaries of administrators and workers which he later reversed, probably incorrectly.⁵⁵

Manual law 7: Satisfaction of growing material needs of the people

Guevara: They combine the ends, an ethical attitude, with the law and from which emerged this runt – the famous 'fundamental' law.⁵⁶

⁵⁰ Guevara, *Apuntes*, 103.

⁵¹ Guevara, *Apuntes*, 103.

⁵² Guevara, *Apuntes*, 198.

⁵³ Guevara, *Apuntes*, 126.

⁵⁴ Guevara, *Apuntes*, 128.

⁵⁵ Guevara, *Apuntes*, 103.

⁵⁶ Guevara, *Apuntes*, 125.

Manual law 8: End of antagonistic contradiction between accumulation and consumption.⁵⁷

Guevara: It might not be antagonistic, but the contradiction remains important and must be considered in the plan every year. Armaments play a big role in this contradiction.⁵⁸

According to the *Manual*, the masses compete to surpass the plans of development. Guevara disputed that this had been achieved in the USSR or Cuba, or anywhere else. The *Manual* advocates the use of money and credit to assure investments for completion of the plans of production. Credit, profit and accumulation were used to overcome anti-planning tendencies, by the use of material incentives.⁵⁹ Guevara argued the process should be reversed. The masses should participate in devising the plan but once finalised it was their duty to complete it, as mechanically as possible with the process dominated by technology.⁶⁰ He complained that the *Manual* does not conceptualise the plan as an economic decision of the masses, conscious of their role. Instead:

‘...they give it a placebo, where economic levers determine its success. This is mechanistic and anti-Marxist. The masses should have the opportunity to direct their destiny, resolve how much goes to accumulation, how much to consumption, the economic techniques should operate with these data and the conscience of the masses assures its completion. The state acts over the individual that does not complete his class duty, penalising him, and awarding in the opposite case. These are educational factors that contribute to the transformation of man, as part of the larger educational system of socialism. It is the social duty of the individual that compels his behaviour in production not his stomach. Education attends to this.’⁶¹

⁵⁷ It is not clear whether this is cited as a law or a tendency.

⁵⁸ Guevara, *Apuntes*, 128-9.

⁵⁹ Guevara, *Apuntes*, 130-132.

⁶⁰ Guevara, *Apuntes*, 131-2.

⁶¹ Guevara, *Apuntes*, 132-3.

Guevara added that annual plans are a hindrance in Cuba, with factories performing brilliantly one year and disastrously the next, because of the lack of raw materials: 'If the system is bad in neighbouring socialist countries, with great interdependence, in Cuba, thousands of kilometres away and with permanent payment problems, it was disastrous.'⁶² Clearly, the planning mechanism had to be improved, both in its democratic function and in fulfilment.

Throughout his critical notes Guevara repeated his criticisms of the Auto-Financing System (AFS), also called 'economic calculus', expounded in the Great Debate, for the use of capitalist categories as economic levers to development: material incentives, profit, credit, interest, bank loans, commodity exchange, competition, circulation tax, money as payment, financial control and the operation of the law of value. 'All the residues of capitalism are used to the maximum in order to eliminate capitalism', complained Guevara. 'Dialectics is a science not some joke. No-one scientifically explains this contradiction.'⁶³

For Guevara the problem of a hybrid system began with the NEP which should have been reversed, not entrenched following Lenin's death. The *Manual* states that the NEP ensured the triumph of the socialist economy over capitalism in the USSR. Guevara retorted that the NEP:

'...constitutes one of biggest steps backward taken by the USSR. Lenin compared it to the peace of Brest-Litovsk. The decision was extremely difficult and, to judge from the resulting doubts in Lenin's spirit at the end of his life, if he had lived a few years longer he would have corrected its most reactionary effects. His followers did not see the danger and it remained as the great Trojan horse of socialism, direct material interest as an economic lever. The NEP was not installed against small commodity production, but at the demand of it.'⁶⁴

⁶² Guevara, *Apuntes*, 133. It is open to speculation as to whether Guevara's use of the past tense was because he felt those problems were overcome or whether it reflected the distance he already felt from the economic situation in Cuba.

⁶³ Guevara, *Apuntes*, 188.

⁶⁴ Guevara, *Apuntes*, 112.

The *Manual* criticised Stalin's thesis that mercantile circulation under socialism represents a break on the development of the productive forces leading to the need for direct exchange between industry and agriculture. Stalin, it stated, failed fully to appreciate: 'the operation of the law of value in the sphere of production, in particular as far as concerns the means of production.'⁶⁵ Despite Stalin's responsibilities for embedding capitalist levers, Guevara still regards him as less reactionary than the *Manual*:

'In the supposed errors of Stalin is the difference between a revolutionary and a revisionist view. He saw the danger in commodity relations and attempted to pass over this stage by breaking those that resisted him. The new leadership, on the contrary, give in to the impulses of the superstructure and emphasise commercial activity, theorising that the total use of these economic levers will take them to communism.'

That few voices oppose this, added Guevara, demonstrates Stalin's great historical crime: 'to have underestimated communist education and instituted an unrestricted culture of authority.'⁶⁶ Guevara asserted that it was a serious failing of the Soviet system to relegate moral incentives.⁶⁷ The *Manual* said that material incentives were used to combine individual interests with society's needs, without even mentioning moral incentives. Guevara compared the *Manual's* approach to that of the worker under capitalism whose interest in their work varied with their pay.⁶⁸ Man does not work for himself under socialism, stated Guevara, he works for the society he is part of, because it is his social duty:⁶⁹ 'The mistake is to take material incentives only in a capitalist sense and then castrate them.'⁷⁰ Guevara repeated that the challenge is to use moral incentives through education to link workers to the project of socialist construction and use economic punishments for incompleteness and material and moral awards for over-completion.

⁶⁵ *Manual, Apuntes*, 195.

⁶⁶ Guevara, *Apuntes*, 195.

⁶⁷ Guevara, *Apuntes*, 155.

⁶⁸ Guevara, *Apuntes*, 118.

⁶⁹ Guevara, *Apuntes*, 135.

⁷⁰ Guevara, *Apuntes*, 136.

For Guevara salaries should be considered as society's recognition that individuals complete a society duty. The *Manual* revealed that are special economic zones where workers are better paid, which Guevara pointed out contradicts its economic law of distribution according to work. He concluded: 'This is all the result of the failure of moral incentives; it is a defeat for socialism.'⁷¹ In response to the *Manual's* citation of Lenin's call to use the: 'enthusiasm awakened for the revolution, but based on personal interest, personal benefit, taking economic calculus as the base',⁷² Guevara wrote: 'It was a crucial moment in the USSR coming out of a long and costly civil war when Lenin, anguished about the general situation, reversed his theoretical conceptions and began the long process of hybridisation that has culminated in today's changes in the structure of economic management.'⁷³

Guevara also criticised as mechanistic and arbitrary the *Manual's* approach to emulation, the goal of which it claimed was completing and surpassing the economic plan and ensuring uninterrupted socialist production. He argued that emulation was: 'in essence a sporting process, collectivised to the maximum by education, it should have as little contact as possible with payment so it is really soaked in what is missing: in the consciousness of the masses.'⁷⁴

The *Manual* cited Lenin again to argue that it is possible in specific historical conditions for backward countries, under the leadership of the working class, to develop in 'non-capitalist ways', from the economic and social perspective. Without passing through capitalist development, they could gradually enter socialism as the democratic-bourgeois revolution gave way to the socialist revolution. Guevara queried whether Lenin used the term 'non-capitalist ways' demanding: 'If it is not capitalist what it is? Hermaphrodite? Hybrid? Facts have demonstrated that is only during a short period of political struggle before the way has been defined, but it will be capitalist or socialist.'⁷⁵

⁷¹ Guevara, *Apuntes*, 152-3.

⁷² Lenin, cited by *Manual*, *Apuntes*, 156.

⁷³ Guevara, *Apuntes*, 157.

⁷⁴ Guevara, *Apuntes*, 139.

⁷⁵ Guevara, *Apuntes*, 99.

Guevara labelled as 'debatable' the *Manual's* claim that there is no danger of capitalism returning to the USSR; that socialism has triumphed fully and definitively.

He said:

'The latest economic revolutions in the USSR reassemble those that Yugoslavia took when it chose the path which will gradually take it back to capitalism. Time will tell whether this is a passing accident or a disposition towards a definitive reactionary current. This is all part of an erroneous conception of wanting to construct socialism with capitalist elements without really changing their meaning. This results in a hybrid system that arrives at a dead end with no exit, or with an exit that is difficult to perceive, that obliges new concessions to economic levers, that is to say retreat.'⁷⁶

Against the *Manual's* assertion that the USSR has entered a phase of transition from socialism to communism, Guevara stated that this is against Marxist theory and contemporary logic: 'First, in today's conditions, with the development of the world market, communism would be made on the basis of exploitation and forgetting the people who whom they trade with. Second, the enormous quantities of resources destined to defence do not allow the full development of communism...'⁷⁷

Guevara believed that the use of capitalist categories and the relegation of moral incentives and education had created a hybrid system in the Socialist bloc where the capitalist superstructure clashed with the socialist infrastructure and impeded socialist development and the transition from socialism to communism. The drain on resources implied by military expenditure, necessary for defence from imperialism, was a further impediment to socialist transition.

⁷⁶ Guevara, *Apuntes*, 112-3.

⁷⁷ Guevara, *Apuntes*, 114.

CLASS RELATIONS

Guevara complained that the Soviets failure to distinguish between pre-monopoly and monopoly capitalism led to an incorrect understanding of class antagonisms between the working class and the bourgeoisie. He noted the analysis of Lin Piao and the Chinese view that the principle contradictory relations were between oppressed and oppressor nations.⁷⁸

Against the *Manual's* formulae for class struggle, Guevara argues that:

- a) In dependent (oppressed) countries, foreign investment turns the working class into relative beneficiaries compared to the dispossessed peasant class, preventing their alliance.⁷⁹
- b) Although historically the national bourgeoisie did play a progressive role in the national liberation struggle, today national capitalists make an alliance with imperialism, particularly in Latin America and Africa.⁸⁰
- c) The working class in developed countries do not unite with national liberation movements in a common front against imperialism. They receive crumbs from imperialism. The authentic miserable ones in most countries are the landless peasants who constitute the truly revolutionary force.⁸¹
- d) In China, Cuba and Vietnam the revolution was not led by a revolutionary proletariat aligned with the peasantry. In Cuba it was a multiclass movement which radicalised after taking state power.⁸²
- e) Under socialism, relations between the working class and small peasants (the generators of capitalism) are economically antagonistic, even though the conflict is mediated politically.⁸³
- f) There is little evidence in USSR or the People's Democracies that socialism eliminates contradictions between the city and countryside. The aim should be

⁷⁸ Guevara, *Apuntes*, 58.

⁷⁹ Guevara, *Apuntes*, 74.

⁸⁰ Guevara, *Apuntes*, 82.

⁸¹ Guevara, *Apuntes*, 83.

⁸² Guevara, *Apuntes*, 87.

⁸³ Guevara, *Apuntes*, 101.

fusion, not alliance, because socialism is not a multiclass dictatorship, but the dictatorship of the proletariat and in preparation for the abolition of classes.⁸⁴

- g) The imperialist working class strengthens in cohesion and organisation, but less so in consciousness. Imperialism has created a dichotomy in their attitude: greater organisation and consciousness of the domestic working class, but without proletarian internationalism externally, which is why, for now, they are no longer the revolutionary vanguard.⁸⁵
- h) Opportunism has won over an immense layer of the working class in the imperialist countries, in respect to their relations with the dependent countries: 'Today we could qualify as the labour aristocracy the mass of workers in the strong countries with respect to the weak ones.'⁸⁶

Guevara refuted the *Manual's* claim that under socialism trade unions are important organisations of the masses with the right to monitor the state on completion of work and protection legislation. Cadre could fulfil these roles, he said:

'Trade unions appear anachronistic, without meaning, above all in the way they are organised nationally, which is nothing more than the result of a special situation in the USSR, in a particular historical moment, copied later in the rest of the socialist countries. In a society where the proletariat has taken power, this organ of class struggle should disappear, transform itself. Sustaining it has bought out two things: on one side the bureaucratisation of the workers' movement, on the other, the difference between workers, as the social support they provide depends on the wealth of each trade union and from these the different salaries exist.'⁸⁷

For claiming the dictatorship of the proletariat is not necessarily violent class war, Guevara accused the *Manual* of opportunism: 'The dictatorship of the proletariat is a regime of violence against the bourgeoisie; it is clear that the intensity of the struggle

⁸⁴ Guevara, *Apuntes*, 113.

⁸⁵ Guevara, *Apuntes*, 61-2.

⁸⁶ Guevara, *Apuntes*, 86.

⁸⁷ Guevara, *Apuntes*, 123-4.

depends on the resistance of the exploiters, but it will never be a regime of rose water, or it will be devoured.’⁸⁸ The term ‘democratic centralism’ he said, was a sonorous phrase, which encapsulates the most dissimilar political structures and, therefore, lacking any real content.⁸⁹

While the *Manual* talked about conscious and fraternal worker discipline, Guevara stated that work discipline is imposed by force in class society, including socialism, which uses compulsion helped by education until discipline becomes spontaneous: ‘To be consistent, here they should have put the lever of material interest as a disciplinary factor, which it certainly is, but that also goes against communist education, in the way it is currently applied.’⁹⁰

Finally, the *Manual* concluded that even under communism the state will remain necessary, in order to defend the USSR and the other countries of the Socialist bloc against imperialist aggression. A statement which Guevara replied was irreconcilable with the present theory:

‘First, can communism be built just in one country? Second, if it is necessary for the State to defend the country, this should complete the function of the dictatorship [of the proletariat], or it is something else, or change the theory. Problems like these cannot be posed (and not resolved) in one isolated paragraph, whatever *Manual* it may be. There are many statements in this book that appear in the formula of the Holy Trinity; they are not understood but faith will resolve them.’⁹¹

Guevara’s analysis of class relations focuses on the effects of imperialism: in the oppressor nation, the oppressed nation and between the oppressed and oppressor nations, which undermines the mechanistic and orthodox Marxist formulae in the *Manual*. His acute understanding of socialism being the dictatorship of the proletariat

⁸⁸ Guevara, *Apuntes*, 100.

⁸⁹ Guevara, *Apuntes*, 123.

⁹⁰ Guevara, *Apuntes*, 138.

⁹¹ Guevara, *Apuntes*, 184.

and communism being the abolition of classes leads him to deride the apologetics of the *Manual* which attempts to air-brush the inherent violence of class struggle.

INTERNATIONAL RELATIONS

Guevara criticised the Soviet Union's so-called 'Leninist thesis' of peaceful co-existence and economic emulation with the advanced capitalist or imperialist world:

'This is one of the most dangerous theses of the USSR. It could be approved as an extraordinary possibility, but cannot become the *leit motiv* of policy. Even now the masses are incapable of stopping the war and the demonstrations against the war in Vietnam are because of its bloody consequences. It is the heroism of the Vietnamese peoples' struggle that imposes the solution; the policy of appeasement, on the other hand, has reinforced Yanki aggression.'⁹²

Where the *Manual* claimed that war is no longer fatally inevitable, Guevara retorts: 'It would be good to determine what it is that these people call war.'⁹³

Moving on from peaceful co-existence to economic emulation, Guevara agreed that communism presupposes abundance, but against the *Manual's* assertion that communism necessarily has much higher productivity than capitalism, he argued that strict comparison with capitalism was not necessary:

'To make communism a quantitative and changing goal, that should match capitalist development which continues progressing, is mechanistic on the one hand and defeatist on the other. Not to mention that no-one has, or can, establish rules for peaceful emulation with capitalism, which is a universal aspiration, noble in a superficial sense,

⁹² Guevara, *Apuntes*, 91-2.

⁹³ Guevara, *Apuntes*, 92.

but dangerous and selfish in a serious sense, as it morally disarms the people and obliges socialism to forget other peoples left behind in order to continue with emulation.⁹⁴

This echoes Guevara's criticisms espoused in international forums that the most advanced socialist countries were failing to provide disinterested support to underdeveloped countries and basing their trade on the law of value.⁹⁵ For Guevara the challenge for socialism is not to win in emulation with capitalism, but to resolve the contradiction created by the existence of private means of production, for example, collective farms, and to ensure communist education. Economic emulation, he said: 'is the thesis of an inferiority complex, with eyes permanently fixed on the imperialist model.'⁹⁶ The *Manual* stated that peaceful coexistence and economic emulation strengthens the Socialist bloc against the capitalist world, drawing dependent countries towards the socialist path through fraternal relations and economic assistance and fair trade. Guevara denied that there is evidence to support this statement. For example, successes in Brazil and India were due to capitalist investment.⁹⁷

In response to the *Manual's* claim that economic planning and mutual assistance between Socialist bloc countries are a characteristic of the socialist state in regards to economic organisation, Guevara stated that while this is true in theory, in reality: 'internationalism is replaced by chauvinism (of big powers or little powers) and submission to the USSR, thus maintaining the discrepancies between the other democratic peoples (CAME). How should all this be recorded? It is difficult to say without a profound analysis and documenting the motivations of every attitude taken,

⁹⁴ Guevara, *Apuntes*, 185-6.

⁹⁵ 'There should be no more talk about developing mutually beneficial trade based on prices forced on the backward countries by the law of value and the international relations of unequal exchange that result from the law of value... The socialist countries have the moral duty to put an end to their tacit complicity with the exploiting countries of the West.' Guevara, 'At the Afro-Asian conference in Algeria' in David Deutschmann, (ed), *Che Guevara Reader: Writings on Guerrilla Strategy, Politics & Revolution*. Melbourne: Ocean Press, 1998 (2nd edition), 303.

⁹⁶ Guevara, *Apuntes*, 179.

⁹⁷ Guevara, *Apuntes*, 90.

but what is certain is that it commits an outrage against all the dreams of the world's honest communists.'⁹⁸

The *Manual* also claimed that economic development in the socialist countries strengthens relations between them, in direct opposite to capitalism. Guevara said: 'The theory could raise the problem of unequal development also for socialism. The practice has posed the problem of irreconcilable contradictions, sometimes of an ideological character, that always have a material, economic base. From them stem the positions taken by the USSR, China, Romania or Cuba in problems apparently unlinked to the economy.'⁹⁹ Guevara cited the most explosive examples of conflicts as between USSR-Albania, USSR-China and China-Cuba to undermine the *Manual's* claims. He added that: 'There are many more but for tactical reasons or fear they have not erupted openly.'¹⁰⁰

For Guevara, the example of CAME exposed as a lie the claim of mutual socialist assistance between equal states. This is because the base of the trade price is the international market which is distorted by unequal exchange, enriching the industrialised country and detrimental for the exporters of raw materials.¹⁰¹ Just as he opposed interest being charged to state enterprises within Cuba, Guevara objected to the imposition of interest between socialist countries. It is immoral, he said: 'to charge interest for capital, the amount of interest is secondary.' However, he added that: 'The USSR and China have most consistently followed a policy of proletarian internationalism in this regard.'¹⁰² This was recognition of the vital support received by Cuba from both those socialist powers. Guevara impelled the Socialist bloc to equalise trading relations: 'It is necessary to create indexes of productivity that oblige the more developed country to provide goods cheaper and accept goods more expensive from the less developed countries'.¹⁰³ This was necessary to balance

⁹⁸ Guevara, *Apuntes*, 130. CAME was the Council for Mutual Economic Assistance, an economic organisation for trade and cooperation between the socialist countries, 1949-1991.

⁹⁹ Guevara, *Apuntes*, 189.

¹⁰⁰ Guevara, *Apuntes*, 189. See K. S. Karol, *Guerrillas in Power*, trans. Arnold Pomerans. Britain: Jonathon Cape. 1971 for an explanation of Cuba's relations with the USSR and China.

¹⁰¹ Guevara, *Apuntes*, 193.

¹⁰² Guevara, *Apuntes*, 192.

¹⁰³ Guevara, *Apuntes*, 173.

growth between the advanced and backward countries. For Guevara, such disinterested internationalist solidarity was the highest expression of socialist consciousness and Cuba had already begun to practice it by the mid-1960s, a characteristic of the Revolution which was to expand into massive military, educational and medical assistance to poor countries around the world, from Angola to Venezuela.

There appears to be a contradiction in Guevara's position, in that he criticised peaceful coexistence, but also pointed out that the arms race is an obstacle to the transition from socialism to communism. This suggests Guevara did not believe that it was possible to reach communism until at least the big powers had become socialist.

CONCLUSION

Guevara concluded that modifications to Soviet political economy encapsulated in the *Manual* were: 'changes imposed by pragmatism and the lack of scientific analysis.'¹⁰⁴ The violent shake up provided by the 20th Congress of the USSR Communist Party following Stalin's death disturbed the lethargy in relation to political economy of socialist transition, but did not it propel it forward: 'Compromised by the exhaustion of the possibilities for development because of the hybrid economic system and under pressure from the superstructure, the Soviet leaders took a step backwards that complemented the new organisation of industry. Lethargy replaced repression, but both maintained the same dogmatic characteristic.'¹⁰⁵ Here was Guevara's principal concern, that the lack of theoretical analysis meant that the dialectical processes underway could not be properly analysed and therefore, contradictions could not be resolved. Or rather, that they were being resolved, but increasingly in the form of concessions to the law of value

¹⁰⁴ Guevara, *Apuntes*, 120.

¹⁰⁵ Guevara, *Apuntes*, 194.

and capitalist mechanisms which threatened the restoration of a capitalist mode of production.

Guevara's critique of the Soviet *Manual of Political Economy* constituted a preliminary step taken by him to contribute to the formulation of a theory of transition to socialism which would facilitate the search for solutions to the problems cited. Vitally important is the fact that his theoretical ideas had been developed in the concrete reality of Cuba's Revolution and transition to socialism and through his daily practice as Minister of Industries. As stated, although Guevara criticised from the left, it was intended as constructive.

Guevara sent these notes to Borrego from Prague before returning to Cuba briefly in preparation for the guerrilla campaign in Bolivia. Even there, in the mountains of South America, he continued his theoretical investigations, preparing a similar manuscript of philosophical notes, which is yet to be published. It is difficult to speculate about the impact of Guevara's critique of the *Manual* although his compañero Edison Velázquez pointed out that Borrego passed the notes on to Castro, who had already received the letter cited above in 1965 at the time of his departure from Cuba. Velázquez affirmed: 'Fidel is not stupid and he had a lot of affinity with Che. He began to prepare for events. He couldn't say it publicly because we were receiving everything from the Russians, but he prepared financial reserves for when the Soviets disappeared, otherwise we would not have been able to survive the collapse.'¹⁰⁶ The legacy of Guevara's theoretical and organisational structures in Cuba is an area for further investigation. It is needless to say that Guevara's prediction was correct, capitalism has returned to all the Soviet bloc countries. This chapter and the previous theory chapter in this thesis have illustrated the scientific method of analysis which led Guevara to forewarn that that collapse was inevitable.

¹⁰⁶ Velázquez, interview, 21 January 2006.

CHAPTER 12

Assessment and conclusion

*'It might be that some of Che's ideas are closely linked to the initial stage of the Revolution... But many of Che's ideas are absolutely relevant today, ideas without which I am convinced communism cannot be built, like the idea that human beings should not be corrupted; that they should never be alienated; the idea that without a consciousness, simply producing wealth, socialism as a superior society could not be built, and communism could never be built... Had we known, had we learned about Che's economic thought we'd be a hundred times more alert... I'm absolutely convinced that ignoring those ideas would be a crime... Che was also a revolutionary, a thinker, a person of doctrine, a person of great ideas, who was capable with great consistency of working out instruments and principles that unquestionably are essential to the revolutionary path... Che is a figure with enormous prestige. Che is a figure whose influence will grow.'*¹

For forty years since his death, the world has laid claim to Ernesto 'Che' Guevara. He has been adopted variously as a figurehead of anti-imperialism, as a symbol of rebellion, as a hero of armed struggle and his image has been globally merchandised. Yet whether he has been revered or derided, the persona that has been appropriated is but a shadow of the real Guevara. His most important contributions, to socialist political economy and economic management in Cuba 1959-1965, have been neglected. Consequently, the lessons of those contributions have not been exploited, either within Cuba or outside. This thesis has served to restore the complex and multifaceted man to his full dimensions.

¹ Fidel Castro, 'Speech by Fidel Castro on October 8, 1987' in David Deutschmann (ed) *Che: A Memoir by Fidel Castro*, Melbourne: Ocean Press, 1994, 151-3.

In detailing Guevara's work as head of the Department of Industrialisation, President of the National Bank and Minister of Industries, the thesis has rescued the rich and dynamic history of those institutions, documenting the work of his colleagues, highlighting the concrete circumstances of the first years of the Revolution and contributing significantly to the understanding of the economic history of Cuba. In analysing Guevara's study of Marx's *Capital*, his critique of Soviet political economy and his recourse to the technological and managerial advances of capitalist multinationals, the research offers an invigorating new contribution to the field of socialist theory. Most important, it connects his theoretical and practical work, demonstrating how Guevara's Marxist analysis of the law of value was integral to the policies created as part of the BFS. The BFS was Guevara's solution to the challenge of increasing productive capacity and labour productivity, in conditions of underdevelopment and in transition to socialism, without relying on capitalist mechanisms.

Part One of this thesis demonstrates how the existing literature on Guevara has placed blinkers on history, by emphasising Guevara's military exploits and focussing on his childhood and travels in Latin America. The period of Rectification from 1986, when Cuba pulled back from the Soviet model, initiated a tentative examination of Guevara's economic ideas, but the literature failed to detail how Guevara strove to concretise this analysis through his policy formulations. Thus an essential aspect of Guevara's methodology was lost; the test of theory in practice and experience as the basis for theoretical development. This neglect has been corrected in this thesis. Part One also highlighted the polemical nature and political bias of Cuba studies, focussing on economic history and the controversy over statistical analysis. As stated, the approach adopted here is predicated on assessing Guevara's aims and objectives on their own terms. His emphasis on consciousness and efforts to create a technological base and administrative control of the economy, without recourse to the law of value, cannot be measured in terms of GDP. Furthermore, Guevara's economic management system, the Budgetary Finance System (BFS), was original and evolving, developed in the context of the US blockade, CIA sponsored invasion and the threat of nuclear conflagration, over a period of just four years.

There are too many variables to consider for a useful comparison with the economic management and results in other ministries operating under alternative systems. Therefore, there is little utility in applying such statistical analysis.

Part Two of the thesis demonstrates Guevara's centrality in driving the structural changes which transformed Cuba from semi-colonial underdevelopment to independence and integration into the socialist bloc between 1959 and 1961. His experiences in the military, political and economic spheres: purging the old army, the Agrarian Reform Law, forging unity between internal revolutionary forces, leading the first overseas mission to expand trade and relations, his observations about economic management in Yugoslavia, as head of the National Bank and Department of Industrialisation during nationalisation; all fed into the structures of the BFS which emerged as a practical measure to solve concrete problems. Part Two also describes the theoretical base which the BFS was given as Guevara immersed himself in the study of Marxism, leading him to open debate with proponents of the Soviet system of economic management in the Great Debate 1963 to 1965. The chapters in Part Two provide the essential historical and theoretical background necessary to understand Guevara's solutions detailed in Part Three.

The BFS combined budgetary control with an ideological paradigm. Guevara bridged the gap between the critical distance of 'free' Marxists, critical of existing socialism, and the pragmatism of 'state' Marxists. His theoretical analysis had concrete consequences. Guevara's challenge was to demonstrate that socialist political economy could construct a system which developed the productive forces simultaneously with socialist consciousness, thus preparing for the transition to communism. Part Three has examined the organisational structures and control mechanisms Guevara created in MININD, demonstrating how they link to his Marxist formation. In the process this thesis has provided the first record of Guevara's role in several critical areas: promoting education and training; establishing administrative control, based on accounting, investment and supervision systems; forging workers' participation in management; founding research and

development institutions to apply science and technology to production; and formulating policies to raise consciousness and commitment to the Revolution, whilst institutionalising psychology as an economic management tool. The thesis findings are summarised below.

Chapter 6 details Guevara's three approaches to tackle the low educational, political and skills levels of the Cuban population, following the exodus of professionals: education as culture, political education and education for production. It shows the administrative mechanisms developed to achieve these ends: sixth grade exams, the School of Administrators, directors' exams, education for the unemployed and technical training. It illustrates how Guevara aimed to break the link between work and remuneration at the heart of the capitalist mode of production, undermining the law of value and decommodifying labour, to convert work into a social duty and equate self-improvement with social development. The policies developed in MININD were reflections of an educational drive underway throughout Cuban society. Guevara's particular contribution lay in linking education to production and forging a commitment to *superacion* [self-improvement] which turned the ministry into a giant school.

For Guevara, the plan and the law of value were alternative mechanisms for determining production and consumption levels. The plan applied administrative compulsion, while the market applied financial compulsion. Chapter 7 details Guevara search for levers to implement administrative control of the economy. Centralised production budgets were the first step towards this. Accounting systems had to be unified and data analysed in real time to facilitate cost control as the basis for increasing productivity and efficiency. Guevara aspired to implement the most advanced, capitalist techniques even while tackling innumeracy and the absence of an accounting culture among new administrators in MININD. Supervision was a tool to monitor and enforce administrative control, while investment, necessary to expand production, would be determined by political priorities rather than the profit motive. Success in this sphere was relative. MININD established a functional system of

accounting and data analysis. The system of inventory and cost control and the supervision apparatus were adequate to prevent production bottle necks and to deter or detect thieving and corruption. These were important contributions which were under-utilised in the following period. Indeed, Guevara's ambitious projects for computerised accounting and automated economic analysis could make little progress, due to technological backwardness. The significant achievement, however, was that Guevara articulated this paradigm of automated administrative control, linking it to his analysis of socialist construction.

At the heart of Guevara's BFS was a conception of Cuba as one big factory. Workers' management meant workers' ownership over the means of production so that surplus value was transformed into surplus product and production for exchange into production for use. Chapter 8 details the policies which Guevara devised to promote workers' participation in production: factory visits, Committees for Spare Parts, the Movement of Inventors and Innovators, Advisory Technical Committees, Production Assemblies, the Campaign to Construct Your Own Machine, Committees for Local Industry, the Plan of Integration, Hygiene and Safety procedures, policies to tackle absenteeism and the Personal Records. These aimed to harness the experience and creativity of the working class to resolve production problems, raise productivity, and to foster workers' identification with the production process. They were mechanisms to equip the working class for increasing decentralisation and direct control over production. This was vital for the transition to communism as well as to overcome the practical problems. The integration of the Cuban population today in organisations of the masses and work-based associations testifies to the success of the principle of integration in general. However, while the obstacles which Guevara faced, economism and hierarchical notions, have been overcome, continuing economic and military attack against the Revolution have limited the feasibility of decentralising control over production to the Cuban masses.

Chapter 9 details Guevara's recognition that technological innovation is the key to revolutionising the productive forces. Communism implies a highly productive and

efficient mode of production. Therefore, socialism was a phenomenon of technology, as well as consciousness. The challenge was to foster the application of science and technology to production without recourse to the law of value manifested through competition under capitalism. To this ends he set up research and development institutions within MININD. In addition to fostering development in four strategic sectors: metallurgy, naval construction, electronics and sugar cane derivatives, the institutes served immediate goals: to substitute imports, increase the value added to primary materials, create a mechanical base and produce spare parts. The backwardness of Cuban industry and human resources limited the progress of these institutes and their economic impact. However, there were tangible results, particularly in metallurgy and machine production, and Guevara was arguably the protagonist behind the project to mechanise the sugar cane harvest. His real achievement was to introduce a methodology for applying science and technology to production, to force that agenda onto the national development strategy and lay the foundations for the technical and scientific training infrastructure which is so strong in Cuba today.

For Guevara the importance of consciousness is that it replaces capitalist mechanisms as the lever to action. Consciousness was understood as social conscience, a commitment to the social and economic justice aims of the Revolution. Guevara was concerned about the human condition. He believed that changes in relations of production were reflected in human psychology. He sought to replace the alienation and antagonism under capitalism with integration and solidarity under socialism. The process was one of searching and experimentation. Chapter 10 demonstrates Guevara's insistence on the dialectical relationship between consciousness and production, in which incentives were the key to raising productivity and efficiency. Socialist emulation and voluntary labour were policies to institutionalise moral incentives, while other mechanisms served as moral disincentives, forging the concept of work as a social duty. Psychology was a tool for measuring consciousness at the level of the individual. It was also a mechanism to evaluate the ability to cope with the responsibility of management, to improve leadership qualities and the link between the workers and management. The total

identification of Guevara with the project of forging socialist consciousness and sacrifice testifies to his achievement in this area. However, what has been neglected, until now, is his utilisation of psychology as a tool to accompany this. This thesis has filled that gap.

There is an apparent paradox between Guevara's paradigm for socialist development and the historical reality. On the one hand Guevara aspired to the automated control of production and administration, to have technical specialists in every branch and to develop the world's most complex industries in Cuba. On the other hand was the reality of underdevelopment, the chaos incurred by the nationalisation of industry, the US blockade and military aggression, the exodus of management professionals, and the inadequate training and experience of the new managers, the low educational level of the workforce in general and the relative backwardness of imported socialist bloc factories. However, Guevara insisted on the need to prepare an infrastructure and introduce a methodology integral for future developments, even while struggling to overcome the immediate deficiencies. In this he was successful. Furthermore, Guevara's closest collaborators continued in key management roles in the Cuban economy long after his departure. In many cases these individuals subsequently pursued specific policies or general principles that Guevara developed as part of his BFS. This, in turn, contributed to Guevara's impact on the theoretical and organisational structures in Cuba over the last 40 years.

In Guevara's search for solutions to both the theoretical problems of socialist transition and the concrete problems of Cuban economic history, key themes stand out. First, Guevara's conception of Cuba as one big factory. There should be no commodity exchange between enterprises and ministries because there was no change of ownership. Second, engaging the working masses with daily production problems, the process of learning by doing, trial and error, making corrections *sobre la marcha* [on the move] and promoting the view that commitment to production was a revolutionary act. Third, the importance of criticism and open debate, responsibility and accountability for leaders. This was part of his determination to get to the root of problems in order to solve them. Fourth, working with experts regardless of their

ideological affiliations, harnessing their expertise in the interests of socialist production and integrating them into the revolutionary process. Fifth, adopting the most advanced technology available, from management techniques to means of production, and laying the groundwork for technological advances even while struggling to overcome backwardness. Sixth, a flexible approach to the questions of control, decentralising to encourage initiative and centralising to ensure control.

Following Guevara's departure from Cuba in 1965, MININD was divided into separate ministries and much of his apparatus was dismantled. Meanwhile, Guevara continued to develop his theoretical contribution, applying his interpretation of Marxism to a critique of the Soviet Manual of Political Economy. Chapter 11 illustrates the scientific method of analysis which led Guevara to forewarn that capitalism was returning to the socialist bloc.

Guevara had been convinced that the BFS was a major advance for socialist political economy, but the tools he left behind were underutilised. This limited his legacy. Nonetheless many his policies had been embedded in Cuba society, as was his methodological approach to problems of production and social-relations. It is impossible to attempt to qualify precisely which mechanisms operational in Cuba today were personally created by Guevara. As an individual he operated within an historical context, a dynamic moment in which his own theory and practice bounced off society in general and other leaders in particular. Not only was Guevara shaped by his personal experience prior to joining the revolutionary struggle in Cuba, but he was also influenced by the character of that struggle and by Fidel Castro and other protagonists' vision of revolution. Guevara's BFS was a product of both his intellectual and practical experiences. But much of these experiences were collective and many individuals and intellectual paradigms contributed towards their formation.

Guevara's outstanding contribution was to devise a system of economic management that integrated his general theoretical analysis of socialist political economy with the particular reality of Cuba and its level of economic development. The specificity of

the BFS mean that blanket copying the system would limit its effectiveness and contradict the dialectical methodology Guevara applied. However, there are key principles and premises encapsulated in the BFS, a methodological approach to socialist transition that has general applicability.

Twenty years ago Castro had predicted that: 'Che is a figure whose influence will grow.'² This has proved to be true, not just in Cuba where school children daily pledge 'to be like Che', but also throughout Latin America. On May Day in 2005, Venezuelan President Hugo Chávez Frías said: 'Che was more than just a martyr, more than just a heroic guerrilla fighter, he was also a Minister in the Cuban government and developed many ideas on how to build the new socialist society...we must study and learn from his thoughts.'³ In December 2005, newly elected President of Bolivia, Evo Morales also laid claim to Guevara's legacy. The prevalent leftward trend throughout Latin America has generated further potential for a critical evaluation and reassessment of his work, one which includes the ideas and policies developed in Cuba 1959-1965. To paraphrase Guevara: in detailing his contribution to socialist political economy and economic management in Cuba 1959 to 1965, this thesis provides flesh and clothing to the skeleton formed over the last forty years in the popular image of Ernesto 'Che' Guevara.⁴

² Castro, *Speech*, 151-3.

³ Venezuelan President Hugo Chavez Frias. Speech on May Day 2005.

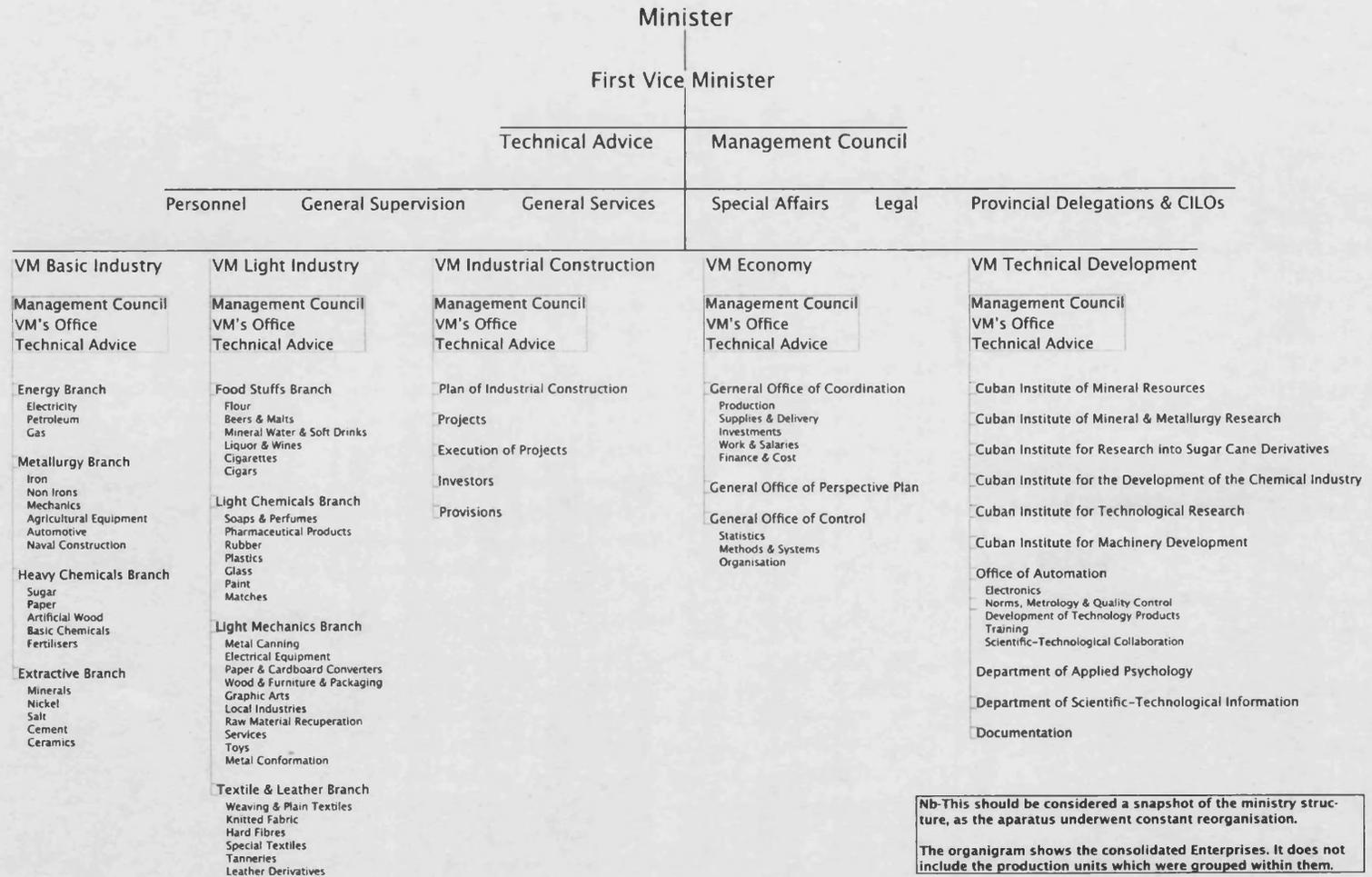
⁴ 'The skeleton of our complete freedom is already formed. The flesh and clothing are lacking; we will create them.' Guevara, 'Socialism and Man in Cuba' 1965, in Deutschmann, David (ed): *Che Guevara Reader: Writings on Guerrilla Strategy, Politics & Revolution*. Melbourne: Ocean Press, 1998 (2nd edition), 213.

APPENDICES

APPENDIX 1

Organigram of Ministry of Industries

Ministry of Industries: Organigram



Nb-This should be considered a snapshot of the ministry structure, as the apparatus underwent constant reorganisation.
The organigram shows the consolidated Enterprises. It does not include the production units which were grouped within them.

APPENDIX 2

Standard interview questions

Employees of the Ministry of Industries.

- 1 ¿Cuál fue su participación en el proceso revolucionario de Cuba en los años 50?
– *What was your participation in the revolutionary process in Cuba in the 1950s?*
- 2 ¿Qué posición mantuvo entre el triunfo de la Revolución y 1970?
– *What positions did you hold between the triumph of the Revolution and 1970?*
- 3 ¿Qué le llevó a sostener ese papel o posiciones?
– *What qualified you to take up these roles or positions?*
- 4 ¿Cuales fueron los principios de su interacción con Che y con que frecuencia sucedió?
– *What was the origin of your interaction with Che and how frequent was it?*
- 5 El carácter socialista de la Revolución fue anunciado en Abril de 1961. Sin embargo, la propiedad estatal de los medios de producción y la planificación estatal se introdujeron con anterioridad. ¿Cuándo y cómo se hizo obvio para usted que para el Che, el Departamento de Industria y posteriormente el Ministerio de Industria jugarían un papel esencial en la construcción de la sociedad socialista-como oposición al simple desarrollo capitalista nacional en un país subdesarrollado?
– *The socialist character of the Revolution was announced in April 1961. However, state ownership of the means of production and state planning had been introduced before that. How and when did it become obvious to you that for Che, the Department of Industrialisation and later the Ministry of Industries would play an essential role in the construction of a socialist society – as opposed to simply national capitalist development in an underdeveloped country?*
- 6 ¿Cómo se hizo consciente de que Che estaba envuelto en la polémica teórica respecto a la construcción del socialismo? Si es así, cuales entendió en ese momento eran las diferencias fundamentales entre los oponentes en el Gran Debate?

- *How did you become aware that Che was engaged in the theoretical polemic concerning the construction of socialism? If so, what did you understand at that time as the key differences between opponents of the Great Debate?*
- 7 En ese momento, cuanto entendió del sistema presupuestario financiero del Che?
¿Cuál fue su concepción sobre sus fines teóricos y su opinión sobre su estructura organizativa?
- *At that time, how well did you understand Che's Budgetary Finance System? What was your conception of its theoretical aims and your view about its organizational structure?*
- 8 ¿Cómo fue informado de la teoría y estructura organizacional del sistema presupuestario financiero?
- *How were you informed about the theoretical and organisational structure of the Budgetary Finance System?*
- 9 Con la perspectiva actual y mirando hacia atrás, como describiría las distintas posturas adoptadas en el Gran Debate?
- *Can you assess the different positions adopted in the Great Debate with hindsight, from your current perspective?*
- 10 ¿Cuál fue la contribución más importante que el Che hizo a la revolución socialista en Cuba?
- *What was Che's most important contribution to the socialist Revolution in Cuba?*
- 11 ¿Hay algo más que le gustase añadir?
- *Is there anything you would like to add?*

Participants in the Great Debate and members of the revolutionary government.

- 1 ¿Cuál fue su participación en el proceso revolucionario de Cuba en los años 50?
- *What was your participation in the revolutionary process in Cuba in the 1950s?*
- 2 ¿Qué posición mantuvo entre el triunfo de la Revolución y 1970?
- *What positions did you hold between the triumph of the Revolution and 1970?*
- 3 ¿Qué le llevó a sostener ese papel o posiciones?
- *What qualified you to take up these roles or positions?*

- 4 ¿Cuándo y cómo se hizo clara la existencia de puntos de vista opuestos en el gobierno revolucionario respecto a la construcción del socialismo en Cuba?
- *How and when did it become clear that there were opposing views within the revolutionary government concerning the construction of socialism in Cuba?*
- 5 ¿En aquel momento, cuales fueron las principales diferencias teóricas que advirtió entre el sistema presupuestario financiero y el sistema de autofinanciación?
- *At that time, what did you perceive as the key theoretical differences between the Budgetary Finance System and the Auto-Financing System?*
- 6 ¿Cuál fue su contribución personal al Gran Debate? Por ejemplo con artículos o discursos, y si fueron publicados. ¿Cómo llegó a la posición que mantuvo? Con quién colaboró y que puntos de vista representaron?
- *What was your personal contribution to the Great Debate? For example articles or speeches – and were they published? How did you come to the position you took? Who did you collaborate with and which point of view did you represent?*
- 7 ¿Cuál fue la reacción al análisis crítico del Che sobre la política económica soviética?
- *What was the reaction to Che's critical analysis of Soviet political economy?*
- 8 ¿Para usted, hasta que punto el Che tuvo éxito en influir en las estructuras teóricas de la Cuba entre 1960 y 1970?
- *In your view, to what extent did Che succeed in influencing the theoretical structures in Cuba?*
- 9 ¿Para usted, hasta que punto el Che tuvo éxito en influir en las estructuras organizativas de la Cuba entre 1960 y 1970?
- *In your view, to what extent did Che succeed in influencing the organisational structures in Cuba between 1960 and 1970?*
- 10 Muchos comentaristas fuera de Cuba han explicado la partida del Che, en 1966, como resultado de su frustración por el relativo fracaso de sus políticas económicas o para atraer a otros ministerios a su sistema presupuestario financiero. ¿Cuál es su punto de vista respecto a esto?
- *Many commentators outside of Cuba have explained Che's departure from Cuba in 1966 as the result of his frustration at the relative failure of his economic policies or his ability to win other ministries to his Budgetary Finance System. What is your view on this?*

11 ¿Desde la perspectiva actual y mirando atrás, podría describir las distintas posiciones que se tomaron en el Gran Debate?

– *Can you assess the different positions adopted in the Great Debate with hindsight, from your current perspective?*

12 ¿Cuál es la contribución más importante que el Che hizo a la revolución socialista en Cuba?

– *What was Che's most important contribution to the socialist Revolution in Cuba?*

13 ¿Cómo describiría la posición de Fidel Castro en lo relativo al Gran Debate?

– *How would you describe Fidel Castro's position in regards to the Great Debate?*

14 ¿Hasta que punto la influencia teórica del Che se manifestó en el periodo de Rectificación desde mediados a finales de los 80? ¿Pueden dar ejemplos?

– *To what extent was Che's theoretical influence demonstrated during the Rectification period from the mid to late 1980s? Can you give examples?*

15 ¿Hay algo que le gustaría añadir?

– *Is there anything you would like to add?*

Example of specific questions: Juan Borroto

1 Usted fue director de supervisión en el MININD. ¿Puede usted explicar la importancia que dio el Che al control administrativo, la supervisión y la auditoría. ¿Qué puede contarme usted sobre su trabajo en esta dirección?

– *You were Director of Supervision in MININD. What can you tell me about the importance that Che gave to administrative control, supervision and audits? What can you tell me about your work in this office?*

2 La dirección de supervisión tenía tres departamentos: inspección, auditoría e investigaciones. ¿Puede usted explicar las responsabilidades y estructuras que tenían estos departamentos?

– *The Office of Supervision had three departments: inspection, audits and investigations. What can you tell me about the responsibilities and structures of those departments?*

3 La dirección de supervisión fue encargada de supervisar los inventarios. ¿Usted me puede explicar la importancia dada en el ministerio de limitar y controlar los inventarios? En la reunión bimestral de enero 1962 el Che dijo que los fondos de las empresas estaban controlado para limitar los inventarios. ¿Cómo fue esto?

- *The Office of Supervision was responsible for supervising inventories. Can you explain the importance the ministry gave to limiting and control inventories? In the bimonthly meeting of January 1962, Che said that the enterprise funds were controlled to limit inventories. How was this so?*

- 4 ¿En la reunión bimestral, marzo 1963, el Che dijo que la tarea de hacer inventarios había caído en manos de las direcciones de las empresas consolidadas, ¿quien tenia este tarea anteriormente?

- *In the bimonthly meeting of March 1963, Che said that the task of making inventories had fallen into the hand of the Consolidated Enterprise management. Whose task was this previously?*

- 5 ¿Cómo director de supervisión, usted participó en las reuniones de la circular (38/43) 90?

- *As the Director of Supervision, did you participate in the meetings for Circular (38/43) 90?*

- 6 En los primeros años del departamento de industrialización y de MININD, había un serio desconocimiento de estadísticas y contabilidad. ¿Hasta que punto fue resuelto este problema antes la salida del Che en 1965?

- *In the first years of the Department of Industrialisation and MININD, there was a serious lack of knowledge of statistics and accounting. To what extent was this problem resolved before Che left in 1965?*

APPENDIX 3

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