

NUCLEAR OPTIONS IN A REGIONAL SUB-SYSTEM:
THE CASE OF ISRAEL, WITH SOME GENERAL
COMPARATIVE REFERENCES

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The proliferation of nuclear technology in the Middle East, primarily in Israel, has created a series of problems and issues for research which are dealt with in this study. A general theoretical framework within which these problems could be discussed, is suggested. First, the concept of regional sub systems of the global international system, is applied to problems of nuclear proliferation in general. Then, the effects of the proliferation of nuclear technology on the one hand, and the proliferation of nuclear weapons on the other, on the various levels of the international system, are analysed. Second, the problem of the uses of nuclear options for diplomatic and strategic bargaining, is considered here, as distinct from that of weapons themselves. A model of these uses is formulated, and two case studies, one on Israel and one, in comparative terms, on India, are investigated.

The development of the nuclear option in Israel is studied within the general framework of the Israeli strategic doctrines. This development triggered a public debate in Israel on nuclear policy. This debate and the international reactions, forced the Israeli government to formulate a policy regarding problems of arms control. Both the public debate and the Israeli position on arms control are studied.

The development of the Israeli nuclear option put the Arab states and especially the Egyptian government into grave dilemmas. The reactions of the various Arab regimes to the Israeli option varied. The Egyptians had to develop a series

of responses, which on their part were directed mainly at creating a deterrent against Israel 'going nuclear'. The major problem of whether the development of the Israeli option has affected the structure of the conflict between the two sides is analysed.

While the development of nuclear options does not appear yet to have had any profoundly de-stabilising effect on the Middle East sub-system (and the same could be said about the Indian-Pakistani relationship), it is argued that a possible future proliferation of nuclear weapons into the Arab-Israeli region, will have destabilising effects on this region and on the Middle East sub-system in general. And it is further argued that if this proliferation is asymmetrical it might have some destabilising effects on the bipolar system as well.

Thus the whole issue of nuclear proliferation in the Middle East, is put within the general framework of different levels of the international system, and the interaction between developments in a sub-system on the one hand, and the bipolar system on the other, is discussed.

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Note on Abbreviations and Glossary

The parliamentary records of Israel (Devray Haknesset) appear in the footnotes as Knesset.

Records of the Eighteen Nation Committee on Disarmament appear as ENDC/PV.

SALT = Strategic Arms Limitation Talks

UAR (United Arab Republic) was used in different places to indicate both the political unit covering both Egypt and Syria, and Egypt alone.

ZAHAL = Zeva Hagana L'Israel (Hebrew), Israel's defence forces.

PALMACH = Plugot Machaz (Hebrew), the shock troops of Haganah (1941-43)

Hanodedet (Hebrew), = Patrol; a special unit of Haganah, created in 1937.

Summary of World Reports appear in footnotes as B.B.C. Monitoring Service.

Introduction

During the last decade or so, nuclear proliferation has become an issue of major concern in international politics, and in consequence the subject of much writing and political analysis. The writing on the subject falls into different categories: There is the question of the effects of proliferation on the structure of the international system. There, the debate has evolved mainly around the question of whether proliferation would stabilise, or destabilise, the international system; and, related to it, the question of what would be the structure of a future international system in which proliferation took place. Then there is the question of the motives behind a decision to 'go nuclear'. More fundamentally, it is asked whether proliferation will take place at all, and if so, at what pace. And in response, there has been a discussion on measures to halt proliferation. This body of literature gradually came to centre on the negotiations of the Eighteen Nation Disarmament Committee in Geneva, and after the Non-Proliferation Treaty was accepted by the United Nations, and later came into force, on the prospects for its success. Finally, there have been studies of different potential nuclear powers and their policies on the one hand, and the policies of the nuclear powers on proliferation on the other. The literature on the effects of proliferation on the structure of the international system, is mainly concerned with the effects on the bipolar system and - to a much lesser extent - on local balances of power. These latter are taken usually to be the relations

between pairs of enemies which have (both or one of them) 8
nuclear options.

Some of the problems involved in nuclear proliferation in the Middle East, have been described and referred to in numerous journalistic articles, and also discussed with a more analytical approach in some general books on nuclear proliferation or on the strategic problems of Israel. However there is no systematic discussion of some basic problems like, the relationship between nuclear development in Israel and more general Israeli strategic doctrines, the Israeli position on problems of arms control in general and on nuclear proliferation in particular, the public debate in Israel on the same problems, and the interaction between nuclear developments in Israel and the nuclear issue in the Arab world. These topics constitute the central part of this study.

The possibility of nuclear proliferation in the Middle East, raises a series of major problems, not least of them the question of the structure of the political relations in the Middle East sub-system in such an eventuality, and the degree of stability (or otherwise) which would result. This problem is discussed in detail in Chapter VI.

The analytical instruments available for such discussions as those I have mentioned are mainly taken from the strategic literature. However, it appears that this literature and particularly that part of which that deals with nuclear proliferation, treated these problems either within the context of the bipolar system, which it usually tended to

identify with the global international system, or within the context of local conflicts between pairs of enemies. In this study, a concept taken from a different branch of international relations, namely the concept of the regional sub-system, or regional subordinate state system, has been applied to the problems of nuclear proliferation. It appears that the introduction of this analytical concept would supply the study on the effects of nuclear proliferation with a different kind of framework within which problems like the structure and stability of a 'world of nuclear powers' could be studied. Furthermore, the study of nuclear proliferation, and those measures of arms control which are related to it, could be introduced into the general theoretical study on regional sub systems and enrich it.

The introduction of the concept of the sub-system also helps in an elaboration on the effects of the proliferation of nuclear technology, and hence nuclear options in the international system.

The study of the effects of the proliferation of nuclear options both on the global international system and on different sub systems raises immediately another major problem which, again, has been mentioned only very briefly, and hardly defined as such, in the literature on nuclear proliferation. This problem concerns the strategic and diplomatic uses of the nuclear options themselves. In other words, how can the potential nuclear powers use their options so as to secure diplomatic and strategic advantages from different categories of powers.

This particular problem is discussed in this study on several levels. First, a general model of these uses is drawn (in Chapter II), to which two case studies are attached. Second, the study of the Arab position (Chapter V) discusses the way in which the Arabs reacted to some of the uses of the Israeli option, and also one of the uses to which Egypt has put her very meagre nuclear capability (which hardly constitutes an option). In this way, the strategic bargaining between a pair of local enemies with nuclear options (at least on the part of one of them), is analysed. This analysis is augmented by a more comprehensive discussion of the Israeli strategic doctrines and the uses of the option as part of them (included in Appendix I).

There are several types of potential nuclear powers. First, local powers like Israel and Egypt which are involved in local conflicts in one sub-system. Another type, includes powers which are involved (or might become involved) in a conflict with China, which on its part has aspirations to become a super power. Then there are those powers which by 'going nuclear' might affect directly one of the super powers and the bipolar system. These are powers in one of the big military alliances and perhaps every potential nuclear power in Europe. It appeared to be worthwhile to include one example from the second category as a comparison to the bargaining process between Israel and Egypt, insofar as the uses of the nuclear options were concerned. Thus India was included as the second case study in the Chapter discussing the uses of the options. Needless to say this case study is not

intended to be a comprehensive study of the nuclear issues in India but only as a short comparison and 'control' to the Israeli case.

The 1967 war constituted a watershed in the political developments in the Middle East. It was felt therefore that, as far as the historical discussion is concerned, this date should be an appropriate one to end the study. Thus Chapters III, IV and V (unless specifically stated otherwise) carry the discussion only up to that date.

Chapter I

NUCLEAR PROLIFERATION AND THE STRUCTURE OF THE INTERNATIONAL SYSTEM

Since 1949 the principal, though by no means an exclusively characteristic, feature of the international system has been the existence of two super powers armed with, first, nuclear weapons, and later on thermonuclear weapons, facing each other within a framework of severe competition and conflict. Each of these powers leads a system of military alliances aimed at preparing for, but mainly deterring, war. Since the beginning of the sixties each of these super powers has acquired the capability to destroy the other almost completely, and has gradually become capable of doing this after absorbing a first nuclear strike from the other side. Furthermore each one of them ^{can} destroy any other power in the world, and in fact any possible coalition of states, without danger of overwhelming damage to itself. ⁽¹⁾

This concentration of military power in the hands of two states could have justified the use of the notion of 'bipolarity', which increasingly became the descriptive term for the system, were it not for the fact that in political terms the picture is far from being as clear cut.

(1) Though this does not take into account the effects of radio active pollution of the atmosphere as a result of large scale nuclear war.

Indeed the growth in the comparative military power of the super powers, described above, which occurred mainly during the sixties, took place already within an international system which, in political terms, approximated less and less to the model of tight bipolarity.⁽¹⁾ The model of bipolarity itself never fully corresponded to the actual international system, but it was somewhat closer to it during the fifties, before the developments in nuclear military capability of the sixties. Bipolarity is at present only one facet of the totality of international interactions, and in this work would mean the complex of relations between the super-powers and the big military alliances.

The super powers are far from enjoying the political advantages which could be assumed to accrue from such a military power capability. This is quite obvious simply from an impressionistic observation of the system. The two super powers are limited in their political activity by many factors. These factors, as Stanley Hoffman has suggested, spring from two main sources; first, the rising price of the use of force; and second, the enhancement of the power of nationalism⁽²⁾. In other

(1) In this context "tight" bipolarity means a system in which all political and military power is concentrated around two poles and in which political decisions in all countries are being dictated by the logic of bipolarity.

(2) See S. Hoffman, 'Nuclear Proliferation and World Politics' in A. Buchan (ed.), 'A World of Nuclear Powers', Prentice Hall, 1966.

words, both super powers are restrained from translating their nuclear might directly into political power because of systems of alliances and commitments which force them always to bear in mind the possibility of direct confrontation between them, a confrontation which neither of them could well afford. The 'rules of the game' of the central balance of deterrence do not allow them to invoke the nuclear power in their hands, and in the last analysis restrain them even from using it against medium and small powers which are not in any way part of any military alliance. As the two super powers become more and more status quo powers, as the central balance of deterrence becomes more stable, and, most importantly, as the super powers perceive the advantages which accrue to them from the stabilisation of this balance, or rather the dangers of its being destabilised, their readiness to transform nuclear force into political influence and control is further eroded. Precisely because of the inhibitions on the uses of nuclear weapons, the ability to use conventional forces with a limited risk by the super powers is also becoming questionable. Even when these are being used as in the case of Vietnam, the limitations imposed on them are considerable. Here the rising force of nationalism and fears of international escalation make even the direct correlation between military force (this time conventional) and political influence again equivocal.⁽¹⁾ Robert Osgood

(1) cf. Pierre Hassner, 'The Nation State in the Nuclear Age', Survey, April 1968.

also recognizes the growing limitations on the usefulness of limited wars when launched by a super power. However he still envisages some possibilities for their use.⁽¹⁾

The "reappraisal" of limited war should be qualified. It is right that the experience in Vietnam should lead to such reconsideration, but it is still too limited an experience from which to draw general conclusions as to the usefulness of limited conventional war for the super powers. It is partly because of the nature of the enemy which the Americans have encountered in Vietnam that the whole concept of limited war has suffered such a blow. It is partly again, because in order to secure one of their objectives in Vietnam, namely to prove their readiness to insure against "Domino Theory" effects in South-East Asia, that the Americans in fact had to secure a total victory in Vietnam. Total victory which could be achieved only by invasion of North Vietnam. But such an invasion was impossible because of fears of international escalation. Thus the concept of limited war in the particular case of Vietnam (when it is seen within the context of an American attempt to contain China) was doubtful from the start.⁽²⁾ In any case, one should draw a distinction between the actual application of limited wars to the "grey areas" of the world, and the development of strategic doctrines for limited war

(1) See The Reappraisal of Limited War, Adelphi Paper No. 54, The Institute for Strategic Studies, London, February 1969.

(2) This important point was suggested by Robert Hunter and Philip Windsor in 'Vietnam and United States Policy in Asia', International Affairs, April 1968.

as part of the super powers direct relationship. This second category serves an important objective as far as attempts to halt escalation into nuclear wars are concerned. In other words, the very fact that strategic doctrines of limited war are still part of the "arsenal" of both sides, enhances the credibility of the nuclear deterrent. It becomes less effective when the relations of one super power and a medium resolute power are concerned. There the correlation even between conventional weapons and political influence of the super powers has suffered.

A discussion of the effects of nuclear proliferation on the structure of the international system must start therefore with the prior question of the effects of the existing nuclear weapons on the system. The structure of the system could be defined in terms of the way in which political power or political influence is distributed within it. It is clear from this definition that it is not simply the distribution of nuclear weapons in the system which decides its structure. The question is really the correlation between the two types of power (nuclear and political). It has already been suggested that what seems to emerge is that there is a gradual widening of the gap between them.

Scholars from diverse schools of thought about other problems in international politics have a common approach as far as the question of the relationship between nuclear weapons and the distribution of political power is concerned. Thus Hertz⁽¹⁾ and Kenneth Boulding⁽²⁾ argue that nuclear weapons changed the nature of international relations to such an extent as to render the nation state obsolete. Pierre Gallois⁽³⁾ and J. Burton⁽⁴⁾ argue that the effect is so enormous as to act as the great equaliser among states. Proliferation, according to them, will in fact strengthen the nation state and stability.

These arguments have been advanced within the framework of a discussion on the future of the nation state in the nuclear age, but they reveal the underlying assumption that in fact nuclear weapons have become the only measure for the distribution of power in the system. The same approach, but from a completely different starting point, is noticeable among scholars (like Wohlsteter) who argue that there is an identification between nuclear weapons and the distribution of power in the system, and

(1) International Relations in the Atomic Age , New York, 1959.

(2) Conflict and Defense , New York, 1962.

(3) The Balance of Terror , New York, 1961.

(4) International Relations , Cambridge University Press, 1965.

that to the extent that there is a need of limited war, at least one super power (the U.S. in this case) can be 'strategically present' everywhere in the globe, and more so than local neighbouring countries, including China.⁽¹⁾ Kennet Waltz argues⁽²⁾ that in fact the gap between the distribution of nuclear weapons power and political power is not as large as all that. It seems, however, that many current events and patterns of behaviour suggest that there is such a gap and that there is no obvious direct automatic correlation between the two types of power. Moreover, on a certain level there is a converse relationship between them. Some examples are: (a) within the military alliances, the 'rebellion' of France and Rumania, (b) as between super powers and small powers: the 'Pueblo affair'; or the American spy plane shot down by North Korea; and the grave limitations on the ability of the super powers to control and influence their allies, client states or quasi-clients all over the globe; (c) the understanding of the need for developing strategies of limited non-nuclear wars. This has enhanced on the one hand the credibility of the nuclear deterrent as between the two super powers, but on the other also points to the lack of correlation between nuclear weapons and political power and

(1) See Albert Wholsteter, 'Illusions of Distance', Foreign Affairs, January 1968.

(2) 'International Structure, National Force, and the Balance of World Power', Journal of International Affairs, vol. 21, No. 2, 1967, Theory and Reality in International Relations.

influence; (d) the converse relationship between nuclear weapons capability and political power in the cases of Britain and France. In neither case has the acquisition of nuclear weapons changed the political importance of these states either way. Britain, which acquired nuclear weapons at the same time as it appeared to lose its conventional capability for military intervention, has lost her Empire, her special relationship with the U.S. has not been dependent on her nuclear capability, and the erosion of her position in Europe has had no relevance to nuclear capability. What this capability has enabled her to do has been to keep certain options open. One option is to join eventually as a senior member, a possible European nuclear deterrent (if and when it is created). Second, on the wide spectrum of deterrence vis-à-vis the Soviet Union, a British (or for that matter a French) independent nuclear deterrent, has some - albeit very limited - credibility. This observation is not a judgement on the desirability (or lack of it) of such independent deterrents within the framework of the Western Alliance, or about the validity of the "minimal" or "proportional" deterrence doctrines. In the case of France, the economic price of the development of missiles capability has perhaps been even higher than the possible political gain she could have hoped to achieve through the options she acquired by her nuclear capability.⁽¹⁾ This price is composed of

(1) On the financial price of the French missile programme alone as distinct from the nuclear programme see Elizabeth Young, The French Strategic Missiles Programme, Adelphi Paper No. 38, The Institute for Strategic Studies, London, July 1967.

several elements: the weakening of its relative economic, and therefore political, power inside Europe; the weakening of the Western alliance in general, and by this the weakening of France itself; and the deterioration of relations with the United States.

The most penetrating and sophisticated discussion on the possible effects of proliferation on the international system is the one by Hoffmann.⁽¹⁾ Hoffmann argues that the current international system is composed of three coexistent layers: (1) Bipolarity, which means that only two states have the capacity to destroy one another completely even if one of them strikes first. Only those two states have the resources both military and economic which allow them to be present in more or less overt form in most of the world; (2) Polycentrism, in which every state "hides" itself behind high fences, and in which the gap between the military component and the overall achievement of objectives has deepened. The nation states are centres rather than powers precisely because of the growing impotence of the military component; (3) multipolarity, in which the gap between nuclear weapons capability and political influence will narrow again and possibly a new hierarchy based on nuclear power will emerge. This last layer is an emerging one, and it will be further developed

(1) See Hoffmann, op. cit.

by proliferation.⁽¹⁾

This analysis conveys part of the complexity of the totality of international relations in the nuclear age. Hoffmann points, quite rightly, to the deepening gap between military capability (mainly nuclear) and political achievement.

However, it is precisely this gap which allows change in the distribution of political power with only limited relevance to nuclear weapons. This is especially the case with small and medium powers. States continue to be active in the political sphere and keep trying to change their political environment. What is important, however, is that these attempts and changes occur more within their immediate environment, and are organised within limited parts of the international system. Thus the concept of polycentrism is less relevant when one considers various more limited parts of the international system, parts which could be defined as regional sub-systems of the global international system. One level of the behaviour of states, namely the one aimed at the international system as a whole, could perhaps be defined within either the context of bipolarity or as polycentric, but a more important part of their international interactions is

(1) For some other important discussions on the problems of the structure of the international system, mainly arranged around the concepts of bipolarity and multipolarity, see: Kenneth Waltz, 'The Stability of a Bipolar System', Daedalus, Summer 1964; Karl W. Deutsch and J. David Singer, 'Multipolar Power Systems and International Stability', World Politics, April 1964; Cirro Elliott Zoppo, 'Nuclear Technology, Multipolarity, and International Stability', World Politics, July 1966; Richard Rosecrance, 'Bipolarity, Multipolarity and the Future', Journal of Conflict Resolution, September 1966; Morton A. Kaplan, System and Process in International Politics, New York, 1957.

conducted within their respective sub-systems. This particular behaviour, in many cases, is not characterised by "hiding behind the fence", but rather by intensive political activity - activity which cannot perhaps amount to real multipolarity in the global international system, but which may have a profound impact within the sub-systems in which it is being conducted. 22

The international system therefore has more dimensions and levels than those suggested by Hoffmann. If it is observed as a unity, the three levels suggested by Hoffmann represent reality, but if it is observed more closely and in more detail, a very large part of the international interactions is conducted within the sub-systems, and may have different characteristics from those of the levels suggested by Hoffmann. It is interesting, however, that within some of the sub-systems one can find - inter alia - one or more of "Hoffmann's levels"; but they may assume different characteristics.

The 'regional sub-systems' ⁽¹⁾ approach suggested below should be construed as a model which by its very nature as a model, only approximates to, and condenses one

(1) On this approach see primarily Michael Brecher, The New States of Asia, London, Oxford University Press, 1963, Chapter 3 & 6. See also Michael Brecher, 'International Relations and Asian Studies: The Subordinate State System of Asia', World Politics, January 1963; Aron Raymond, Peace and War: A Theory of International Relations, New York, 1966, pp.389-395; George Modelski, 'International Relations and Area Studies', International Relations, London, April 1961; J.N. Rosenau (ed.), International Politics and Foreign Policy, New York, 1961, pp.68-77; see also below references in footnotes 1 & 3, p. For some related articles see also Roger Masters, 'A Multi-Bloc Model of the International System', American Political Science Review, December 1961; Wolfram Hanrieder, 'The International System: Bipolar or Multibloc', Journal of Conflict Resolution, September 1965. The sub-system approach is also discussed in the literature on international integration. On the application of this approach to foreign policy analysis see Michael Brecher, Blema Steinberg and Janica Stein, 'A Framework for Research on Foreign Policy Behaviour', Journal of Conflict Resolution, March 1969.

analytical aspect of international politics. As such, and also inherent in this particular model, there is a whole range of ambiguities which are the result on the one hand of the gap between any model and the reality it tries to present, and also because of the interpenetrations of the various sub-systems and the ambivalence of congruence and discontinuity between them.⁽¹⁾ These types of relationship might occur both as between whole sub-systems and also among some actors in the various sub-systems. However, notwithstanding these important ambiguities, the model still suggests that these kinds of relationship (with the qualification of the unique role of the super-powers) are less meaningful than the types of relationship inside the sub-systems.⁽²⁾

The global international⁽³⁾ system comprises

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- (1) On such ambiguities and also on the concepts of discontinuity and congruence in this context, see Oran Young's penetrating essay 'Political Discontinuities in the International System', World Politics, April 1968.
 - (2) And see below.
 - (3) The "global international system" comprises the totality of political international interactions. The use of the term "system" connotes a certain interaction between the different components of the system, which is certainly the case in the current international system. This interaction justifies the use of the concept. It is however clear that interaction does not mean necessarily inter-dependence. Although, and mainly because of the existence of the bipolar system, many moves in the international system are interdependent, still, this inter-dependence is on many occasions limited, and sometimes completely lacking.

different levels and components, one of them is the division into several regional sub-systems. These sub-systems are political international ones and are delimited by geographical proximity. The fact that in some cases they have common historical and cultural elements is not important as far as their nature as international political frames of reference is concerned.

Clearly there are many criteria for defining international sub-systems. The following classification is therefore somewhat arbitrary. What is even more important is that the element of "regionality" may change, in the sense that relations between states belonging to completely different regions may be more meaningful than between states within the same region. As it happens, however, apart from the relations between the super powers, China's growing involvement, and some areas of international interactions of Britain and France, most states organise their more meaningful international interactions within the framework of their regional sub-systems.

A sub-system is defined by a certain concentration of international political activity. Three main criteria are applicable here: (a) the high level of international political interactions between states belonging to this area. This level of activity can be measured by three main methods: the occurrence of conflicts and wars on the one hand, and acts of co-operation, military alliances, etc. on the other hand; the intensity of normal diplomatic exchanges between the various participants; the images and

self-perceptions of the various members of the sub-system about their own international roles and capabilities, and also their images of the capabilities and roles of the other members of the sub-system. (b) The various foreign policy objectives of the members of the sub-system, and also their strategies for achieving them, are primarily concerned with other members of the sub-system, or are concerned with the general system of international relations within the sub-system. K.J. Holsti⁽¹⁾ distinguishes between three types of foreign policy objectives: "core" values or objectives to which states and governments are absolutely committed at all times; middle range goals; and "universal long range goals", which seldom have direct impact on the actual day to day handling of the foreign policy of a state. It seems that as far as the relations in a sub-system are concerned, the two main types relevant are the "core" values and the middle range ones.

(c) The super powers are usually present in the various sub-systems. Inside each sub-system they become members of it, sometimes with more power or influence than other members, sometimes with less power.

Although in the last analysis the behaviour of the super powers in the sub-systems is governed by the bipolar or super power relationship, it is formulated within the special configuration of the situation in the sub-system. Furthermore, distinctions are increasingly being drawn

(1) International Politics, A Framework for Analysis, Prentice Hall, 1967.

between the super power level of relations on the one hand and needs, strategies and the policies of the particular super power in the area on the other. In other words, the super powers themselves may recognize the need to see their relations as having several levels both in general and also, at least analytically, inside each sub-system. In the first case relations between the super powers within each sub-system will constitute a different level from the general strategic and political relations on the global level existing between the U.S.A. and the Soviet Union. In the latter case, they may recognise that certain steps taken within the context of the sub-system have or have not relevance either to the general bipolar relationship or to the situation inside the sub-system itself.

States may exist in the same area but belong to another political (in the sense of international politics) sub-system. But in general geographical proximity has a decisive influence on relations and foreign policy objectives of a state. This is why the concept of a sub-system advanced here is conceived as a regional sub-system.

States may belong to different sub-systems and may change their sub-systems. This change may occur either following a change in self-perceptions which, on its part will lead to a change in foreign policy objectives and the strategies to apply them, or as a reaction to initiatives by other states. These initiatives may include even drastic changes in weapons' systems, as part of the

capabilities of other neighbouring states. The emphasis on the intensity of diplomatic or military interactions allows for flexibility in delineating the borders of a sub-system. Furthermore, because of changes in the intensity of diplomatic and military interactions, sub-systems might expand or contract.

The "regionality" of the sub-systems derives partly from the limitation on the military capability of "reach" in parts outside its geographical sub-system of - by now - almost every country in the world except for the United States and (only gradually) the Soviet Union.⁽¹⁾ Hassner has pointed out that even this strategic capability is not political capability, and factors like history, politics and culture are perhaps more important in deciding the "belonging" of a state to a certain area.⁽²⁾ It is true, however, that as far as sheer military capability is concerned, there is one qualification to this statement, namely, the ability of the medium powers like Britain and France to intervene in some countries in Africa, provided that this intervention will not create large-scale military involvement. To this category belong the various French interventions in former French colonies in Africa and the British interventions in East Africa.

The global international system is composed first of the two super powers and their relationship (constituting

(1) On American strategic mobility see Wohlsteter, op. cit.

(2) See Hassner, op. cit.

a bipolar relationship); second, of the military alliances like NATO which at a certain level are, together with the super powers, part of the bipolar system; third of the activities of some of the medium powers like China, Britain and France which are pursued beyond the sub-systems to which they belong. These activities are conducted within the various sub-systems, outside Europe. Thus, although in one sense the Atlantic Alliance is part of the bipolar system, there is another aspect of relations within the Alliance which is concerned mainly with what is happening inside Western Europe on the one hand and between the West European sub-system and North America on the other hand. Apart from that, the global international system includes the international interactions within the various regional sub-systems.

Brecher⁽¹⁾ suggests six conditions for the existence of such a sub-system:

- (1) Its scope is delimited with primary stress on a geographic region;
- (2) There are at least three actors;
- (3) Taken together they are objectively recognized by other actors as constituting a distinctive community, region, or segment of the global system;
- (4) the members identify themselves as such;

(1) In 'A New Subordinate State System', loc. cit.

- (5) the units of power are relatively inferior to units in the dominant (by which Brecher means the bipolar bloc system) and perhaps the four medium powers Britain, France, Germany and China.
- (6) Changes in the dominant system have greater effect on the subordinate system than vice versa.

These conditions, however, could perhaps be applied after the basic three criteria suggested in pp. 24-25.

It is also doubtful whether conditions 3 and 4 are necessary. The perceptions of outside powers as to the sub-system in general are less relevant than the actual policies and strategies (including conflicts and alliances) pursued by the local powers. The same applies to point 4. The images and perceptions of the local powers inside the sub-system are important not as regards the scope of the region but as regards their images of intentions and capabilities of the other side. To cite two examples: Israel is not considered by the Arabs and also by some Israelis and outside observers to be part of the Middle East sub-system. However, if one applies the criteria of intensity of conflicts and also the images that the Arabs have of the Israeli intentions, then Israel is very much in the Middle East sub-system. Pakistan is considered at least marginally as part of the Middle East sub-system, whereas India is not. But if one considers both these countries' relations with the Middle East one cannot see much difference. In fact both of them should be considered as not being members of this sub-system. Their involvement in Middle Eastern affairs arises not from objectives within this region, or

suspicious about the policies of countries in the Middle East as they might directly affect their own countries, but rather from an effort to recruit diplomatic aid from other outside powers. Their main concern is their own mutual conflict and competition.

Condition 6 is also not entirely valid. If the dominant system means bipolarity in the narrow sense of the strategic relation between the two super powers and only between them, then one can argue that changes in sub systems are not able to affect these relations to any great degree. If the two super powers are becoming less involved in various sub-systems, if their mutual relations are based more and more on the growing stabilisation of the central balance of deterrence, or at least attempts to keep it stable, then changes in sub-systems will not affect this system of relations very much and vice versa. If the dominant system means "bipolarity" in the broader sense, i.e. the whole bloc system and the role of the super powers as world powers, then the case may be different. Changes in the "dominant" system will have great effect on some sub systems; it may also be true that changes in a certain sub-system brought about by a local member of this sub-system may affect the bipolar system to a considerable degree.

No empirical research has been done on the intensity of international interactions in various parts of the world which would allow us to delineate exactly the various sub-systems. Every delineation therefore must be partly or fully impressionistic. Brecher⁽¹⁾ suggests five:

(1) Ibid.

Middle East, America, Southern Asia, Western Europe, West Africa. It seems, however, that there is room for more. The following is an attempt to register a tentative list, of itself of purely heuristic value:

- (1) Western Europe; (2) Eastern Europe;
 (3) Middle East;⁽¹⁾ (4) South East Asia (possibly with Indonesia and Australia); (5) Indian sub-continent and China; (6) East Black Africa; (7) West Black Africa.⁽²⁾

Because the international system is, on one level, divided into sub-systems, the problem of nuclear proliferation should be discussed within this framework as well.

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- (1) On the Middle East as a regional sub-system see apart from Brecher op. cit. also Leonard Binder, 'The Middle East Subordinate International System', World Politics, April 1958. The concept is also used by I. William Zartman, 'Military Elements in Regional Unrest', in J.C. Hurewitz (ed.), Soviet-American Rivalry in the Middle East, Praeger, New York, 1969; M. Brecher, 'The Middle East Subordinate System and its Impact on Israel's Foreign Policy', International Studies Quarterly, June 1969. The Soviet naval build up in the Mediterranean and Western anxieties about it (which are shared by many of the littoral states), coupled with the continued crisis in the Middle East, create a set of interactions which affect the whole of the Mediterranean basin. This might possibly lead eventually to the emergence of a new sub-system of the Mediterranean basin.
- (2) On the sub-systems in Africa see I. William Zartman, 'Africa as a Subordinate State System', International Organization, Summer 1967. Zartman considers the whole of Africa as one sub-system, inclusive of three sub-regions: East Africa; West Africa and North Africa. It could however be argued that the first two are developing gradually their distinct characteristics as separate sub-systems. On a possible South African sub-system see W.L. Bowman, 'The Subordinate State System of South Africa', International Studies Quarterly, September 1968.

Nuclear Proliferation and its effects on the bipolar system and the sub-systems.

The two main approaches to the effects of nuclear proliferation on the international system are concerned with the prospects of peace and stability in a future system in which nuclear weapons have spread to several new countries, or in which there are no obstacles to proliferation as a result of international agreement or the realisation of the special nature of these weapons.

The majority of scholars concerned with the problem present in different ways and arguments the position that proliferation will considerably increase the dangers which already exist in the system. There will be less control over processes of escalation, the probability of nuclear wars will increase many fold and basic detrimental changes will occur in the system. These arguments are enumerated roughly below (and this is not an exhaustive list). They are partly political-strategic; partly military-strategic:-

(1) The mathematical argument namely, that the more nuclear weapons are in the hands of more powers the probability of nuclear wars increases in direct proportion to the number of these powers or at least in some proportion to this number. There is also the argument that the probability of war will increase in a geometrical progression. (1)

(1) F. Aiken, 'Can We Limit the Nuclear Club?' Bulletin of the Atomic Scientists, September 1961.

This argument could be divided into the following:-

(a) as the number of nuclear weapons increases, the probability of their transfer into the hands of the military leadership increases as well. ⁽¹⁾

(b) the danger of a general war occurring because of miscalculation or misjudgement by one man will increase considerably. ⁽²⁾

(c) there is a danger that the bombs will fall into the hands of revolutionary leaders who have nothing to lose and a lot to gain by using the bomb. ⁽³⁾

(2) The present nuclear powers are responsible ones whereas the new nuclear powers, among which will be some of the developing countries - may not as yet be responsible. A further more sophisticated argument along the same lines maintains that indeed even the nuclear powers have acted in a way bordering on irresponsibility, but have somehow avoided becoming engulfed in a nuclear war. In the process of their confrontations they have undergone a process of education. They have educated themselves as to both the dangers of an escalation and to the ways to avoid it. They have learned how to use their nuclear arsenals for threats and blackmail but they have also learned the necessary limitations on the uses of these weapons. ⁽⁴⁾

(1) Aiken, op. cit.

(2) ibid.

(3) ibid.

(4) ibid.

(3) Nuclear proliferation may create dangers of catalytic wars, i.e. a possibility that a minor nuclear power may deliberately cause a nuclear war between the two super powers by delivering a bomb against one of them and succeeding in creating the impression that in fact the other super power was the one which actually delivered it. An irredentist new nuclear power like West Germany is sometimes mentioned as an example.

(4) Nuclear proliferation may threaten the stability of the international system partly for the reasons given above, and also because a process of fragmentation in the system will take place.⁽¹⁾

(5) Acquisition of atomic weapons by one local power will motivate his local enemy to frantic efforts to 'go nuclear' as well.⁽²⁾

(6) The lack of sophisticated and developed technological capabilities will not allow for the development of stable balances of deterrence in a multi-polar power system. The main emphasis in this argument is put on the lack of stability in the international system in general which would be caused by nuclear proliferation. This argument is divided into the following:

(1) Hoffmann, op. cit.

(2) Ibid.

(a) the difficulty of developing a second strike capability. This would increase motivations for a first strike surprise attack. (1)

(b) lack of a capability for building forces for a flexible response strategy. This strategy is important in order to keep options open and maintain deterrence while avoiding escalation. It requires, however, enormous economic potential. (2)

(c) lack of a potential to develop an adequate control and command system. (3)

(d) lack of ability to develop various 'fail safe' measures. (4)

(7) The super powers succeeded in developing tacit understandings as to the control of escalation. The same applies to various arms control measures. Thus there are various accepted 'signals' as between the two super powers regarding the uses of nuclear weapons and the distinction between them and conventional weapons. Nuclear proliferation will upset these sophisticated tacit understandings and thus upset the stability of the central balance of deterrence. (5)

(1) Hoffmann, Zoppo, op. cit., et al.

(2) Zoppo, op. cit., et al.

(3) Zoppo, op. cit.

(4) Zoppo, op. cit.

(5) Zoppo, op. cit., Hoffmann op. cit., Thomas Schelling in 'Signals and Feedback in the Arms Dialogue', Bulletin of the Atomic Scientists, January 1965.

(8) The emergence of new nuclear powers will impose on the super powers the need to resume the arms race in order to defend themselves against these new powers. Thus the main arms race will start again. (1)

(9) Even the threat to go nuclear has destabilising effects on the international system. (2)

(10) The probability of a nuclear exchange between two new nuclear powers will be quite high. Once this happens the established taboo on the use of nuclear weapons will have been eroded. This psychological inhibition has partly been responsible for the fact that no nuclear wars have yet occurred between the two super powers. Once the taboo has been lifted, the danger of war between the super powers or between pairs of nuclear foes will increase considerably. In other words, nuclear weapons will again become an instrument of war. (3)

(11) Reciprocal communication of intentions during crisis situations is crucial in order not to let deterrence fail. This is extremely demanding in situations of crisis when short term tactical considerations tend to become more important than, or at least to obscure, the real important political issues and long range foreign policy objectives.

(1) Hoffmann, op. cit.

(2) ibid.

(3) Hoffmann after R. Aron, see Hoffmann, op. cit.

'The difficulties of maintaining the dynamic requirements for a stable deterrent system and the risks of miscalculation in crisis and limited conflict would be severely multiplied by an increase in independent nuclear decision centers....'(1)

(12) 'Initial experience with nuclear development suggests that adversary powers may not reach deterrent sufficiency at an even pace or with strategic symmetry. The complexity of deterrent calculations would be severely magnified for all powers in the system.'(2)

(13) 'Shifting deterrent relationships could confuse the signalling of intentions between the super powers at tactical and strategic levels.'(3)

In fact, what all these arguments tend to show is the dangers to the stability between the two super powers. In other words, bipolar stability is considered to be identical or almost identical with the stability of the global international system.

(14) Dangers of miscalculation or miscalculation, i.e. a local power which has a nuclear enemy will try to involve his super power ally in a war against the new round.'(4)

Hoffmann argues that in case of proliferation, there are several possibilities: There might be a resurgence of

(1) Zoppo, op. cit.

(2) Ibid.

(3) Ibid.

(4) Hoffmann, op. cit.

bipolarity, either condominium or redivision of the world. Or else there would be a continuation of the existing system (three coexistent levels). Finally, there could be a new hierarchy of powers and also a possibility of fragmentation.

General Gallois argues that nuclear proliferation will in fact increase stability in the international system. The main argument here is that balances of deterrence could be created between different enemies in the world and that gradually proliferation will eliminate war altogether. Furthermore, small powers could deter bigger ones because minimal deterrence is sufficient, and thus the growing equilibrium in the system will be followed by growing stability.

A discussion of the effects of nuclear proliferation on a system composed of sub-systems could certainly make use of the various arguments about the dangers of proliferation. But what is important is that as nuclear proliferation is a strategico-political phenomenon and as international political behaviour can be differentiated according to sub-systems, there is a prima facie case for arguing that nuclear proliferation will have different effects on regional sub-systems on the one hand and on the bipolar system on the other hand (and possibly, on the global international system as well).

Thus the two levels of discussion should be, first, the effects of proliferation on the bipolar system, and second the effects on the various sub-systems. The two variables that are relevant to the structure of the different systems are: stability and equilibrium.⁽¹⁾ A third

(1) For a definition of these concepts, see below p. 41.

possible variable is flexibility, but for the purpose of this discussion only the concept of stability would be discussed, and with some reference to the concept of equilibrium. This is partly for the obvious reason that the problem of stability, or in the present context the avoidance of major violence, is crucial to a world where proliferation takes place, and indeed the literature discussed above was primarily concerned with it, though mainly with the effects of proliferation on the bipolar system. As there is a notion that an international system with a large measure of equilibrium is also more stable, a short discussion of the effects of nuclear weapons on the correlation between equilibrium and stability will be included.

There are several ways in which to assess the effects of proliferation on sub-systems, on bipolarity, and on the global international system. First, to analyse the effects caused by the proliferation of nuclear weapons to Britain, France and China. Second, to assess the effects of the proliferation of nuclear technology, namely the proliferation of nuclear options. Third, to study the expectations of statesmen and scholars who wish their respective countries to 'go nuclear', as to the roles their countries will play in the international system and in their respective sub-systems; and last to discuss the various conditions conducive to stability and equilibrium in the present balance of deterrence and to try to apply them to a world of nuclear powers. This last method is, in fact, the one which has been partly used by the various writers on the problems of nuclear proliferation, although they have

concentrated mainly on the effects on the bipolar system which they, incidentally, tend to identify with the global international system.

The discussion in this Chapter will concentrate on the following: first, a discussion of the effects of proliferation to Britain, France and China; second, some of the effects of the proliferation of nuclear technology (or nuclear options) on the bipolar system on the one hand and to two sub-systems on the other; third, a very brief comment on the future possible effects of the proliferation of nuclear weapons on the bipolar system on the one hand, and in general on regional sub-systems on the other. The burden of this discussion is to show that the proliferation of nuclear options had already multi dimensional effects on both the bipolar system and on two regional sub-systems, and again that in the future one could expect different and complex effects on the relations between the super powers on the one hand and various sub-systems on the other.

Part of the discussion in the rest of the Chapters ties in with these basic notions in the following way: in Chapter 2 there is partly a discussion of the ways in which the proliferation of nuclear technology is being perceived as instruments for pressure. Success or failure in pursuance of this pressure might or might not contribute to the stability in regional sub-systems. In Chapter 4 there is a discussion about the way in which the decision makers of one near-nuclear-weapon power were perceiving the role of a nuclear option within the context of the

objectives of their state, the main objective being the increasing of stability and the strengthening of the territorial status quo. In Chapter 5 there is a discussion of precisely how this option affected the images of the decision makers in the powers opposed to the near-nuclear-weapon state. These images have on their part affected stability. But the main discussion of a regional sub-system is included in Chapter 6.

Stability and equilibrium in international systems could be defined in the following way:

Stability A useful definition is the one suggested by Kenneth Waltz: 'The stability of a system has to be defined in terms of its durability as well as of the peacefulness of adjusting within it.'⁽¹⁾

Equilibrium A state of an international system which is characterised by a distribution of political and military power in which the margins of superiority or inferiority in political power among the various participants is limited, and in which the ratios between the influence exercised by individual members and their actual power is not too unequal.⁽²⁾

It seems that the bipolar system and the balance of deterrence characterising it is now more or less stable, but was certainly suffering from disequilibrium until recently and to a certain extent still is. A multipolar power system is usually characterised by equilibrium and either stability or instability.⁽³⁾ The classical balance

(1) See Waltz, 'The Stability of a Bipolar System', op. cit., p. 887.

(2) This definition is somewhat eclectic.

(3) For somewhat opposing views about the effects of equilibrium on international stability, see Waltz ibid, and Deutsch and Singer op. cit.

of power in Europe was characterised by equilibrium among its 'essential members' and was reputed to have a high degree of stability.⁽¹⁾

That the bipolar system is stable does not mean however that all the sub-systems are or were stable or in equilibrium. It is more accurate to suggest that some of them are stable while others are unstable. According to David Wood⁽²⁾ there occurred 81 'armed conflicts' after the beginning of the atomic age i.e. after 1945 (one of these conflicts the USSR-Iran hostilities started in 1941 but continued until 1947), most of them in sub-systems 'outside Europe and without the participation of a super power.'⁽³⁾ This high incidence of violence suggests a high degree of instability in some sub-systems, particularly when compared with the situation before the Second World War and again before the First World War.⁽⁴⁾

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- (1) On the model of the European balance of power see Morton Kaplan op. cit. from which also the term 'essential members' is taken; on the stability of the European balance of power see also Hans Morgenthau Politics among Nations, 3rd edition, New York 1961; on the balance of power in Europe see also Gullick, The Classical Balance of Power in Europe.
- (2) Conflict in the Twentieth Century, Adelphi Paper 48, The Institute for Strategic Studies, London, June 1968.
- (3) Wood points out that only 28 out of these 81 clashes took the form of fighting between states, whereas 24 of the conflicts before 1939 are categorized as such conflicts. The rest, during both these periods, are categorised as 'armed insurgency against the central government', 'civil war between factions' or 'military coups d'etat'. However, on further investigation it seems that if one includes anti-colonial wars in which a distinct national community fought against another national power (the colonial power), the number of what one could safely term as international conflicts in Wood's list, will increase to 52. One can only add that Mr. Wood's categorisation is not necessarily the best one.
- (4) According to Wood, in the period 1898-1930, inclusive of the First World War, there were 43 of these 'armed conflicts'.

But in the case of the bipolar system, the political disequilibrium it has witnessed is as follows:- First, the U.S. enjoys much more political influence and control and is also much more involved in various sub-systems than the USSR; second, the two super powers together enjoy less political control and influence than could have been expected in view of their enormous military capability.⁽¹⁾ This second disequilibrium affects mainly the global international system as distinct, analytically, from the bipolar system, and derives from the inhibiting forces working within the framework of the central balance of nuclear deterrence. Thus the two super powers sometimes avoid an increase in their political influence in various sub-systems because it may invoke a response from the other super powers which may start a process of escalation. The concept relevant here is that of self-deterrence, i.e. each side deters itself from a certain action that may put its opponent in a situation in which he is almost sure to react because of tremendous pressures to do so. This reaction may start an almost irresistible process of escalation.

The two disequilibria in the bipolar system and in their impact on the global international system do not

(1) See above pp. 13-14.

however destabilise the central balance of deterrence. The lack of direct correlation between equilibrium and stability is thus becoming more evident.

The same situation may be witnessed in different sub-systems, i.e. that stability is not necessarily the outcome of equilibrium. What is important in this respect is the question whether a certain system is "homogeneous" or "heterogeneous"⁽¹⁾, or in Hoffmann's language whether it is a "revolutionary" or a "moderate" system⁽²⁾. According to Raymond Aron homogeneous systems are 'those in which the states belong to the same type, and obey the same conception of policy', whereas heterogeneous systems are 'those in which the states are organized according to different principles and appeal to contradictory values.' One may assume that this definition can in fact cover not only differences between competing ideologies but also between competing conceptions of national role and self-perceptions. In other words, it is not necessarily the case that only differences in conceptions about the domestic social structure of the states participating in the system lead to the heterogeneity of the system, but also, and perhaps more importantly, differences as to the role of the state in the system, the rules of the game itself, and the nature of the system. This last modifi-

(1) See Raymond Aron 'Peace and War', (trans.), London, 1966, pp 99-104, 147-149.

(2) See 'Gulliver's Troubles: or The Setting of American Foreign Policy', McGraw-Hill, New York, 1968, pp. 12-21

cation is quite obvious when the situation in the communist world is being considered. There the internal differences are due more to the second set of factors, i.e. differences in perceptions about the nature of the system.⁽¹⁾ The process of growing heterogeneity in the Communist bloc which in East Europe was due to realities of power; and to the differences in conceptions about states' roles and structures of the various systems, has stopped as far as East Europe is concerned. This was one of the consequences of the invasion into Czechoslovakia in 1968. Indeed the invasion came partly precisely because this process appeared to the Soviet leaders as endangering the international system in East Europe. This process might however be renewed and in any case as long as it went on it is perhaps even safe to claim that the differences in conception as to the structure of the system were more important than the differences in the domestic social structure.

The effects of the proliferation of nuclear technology on the bipolar system.

It is quite understandable that the United States has always found it in its interest to oppose nuclear proliferation. Between 1945 and 1949 American objective and

(1) Russia vis-à-vis China as regard the nature of the global international system and of the bipolar system; the East European states against Russia as regards the structure of relations inside the communist world and perhaps also about the structure of the bipolar relationship.

hope were that the Soviet Union would not acquire these weapons. When this proved illusory, the decision was taken not to help other states to produce these instruments of destruction. Under the MacMahon Act of April 1946, nuclear cooperation with any other state became illegal. However, America was primarily concerned with the simmering cold war, competition and conflict with the Soviet Union and the building up of the alliance systems. The possibility of proliferation seemed remote, and the possible dangers of proliferation to the stability of the balance of deterrence had not yet been considered in depth. To the extent that proliferation might have taken place, the possibility was that it would occur among the Western Alliance. Here the difficulty was that any anti-proliferation policy might have affected the internal stability of the alliance (thus hampering its development which was considered in the fifties as the over-riding consideration).

However, the attention paid to the problems of proliferation gradually grew. A report issued in May 1958 in America by the National Planning Association included a chart suggesting that 1970 might see between eight and twelve independent nuclear weapon states. Its conclusion was that 'most nations with appreciable military strength will have in their arsenals nuclear weapons, strategic, tactical, or both'.⁽¹⁾ Clearly this

(1) '1970 Without Arms Control', The National Planning Association, Washington DC, p. 41.

report proved wrong. The basic approach of the report was mistaken, primarily because it had not dealt with the political and strategic problems involved in nuclear proliferation and instead concentrated on the technological and economic aspects of it. But the first indication of the realisation of the dangers to the central balance of deterrence came with the two famous articles by Albert Wohlstetter 'The Delicate Balance of Terror',⁽¹⁾ and 'Nuclear Sharing: Nato and the N+1 Problem'.⁽²⁾ The American concern with the problem of proliferation grew considerably during the Kennedy administration. This was gradually paralleled by Russian apprehensions about the same problem. However in the Russian case the main concern for some time had been the possibility of Germany "going nuclear". This coloured most of their position during the Eighteen Nation Disarmament Committee⁽³⁾ meetings. In any case, the controversy about the various programmes for nuclear sharing inside Nato bedevilled the Eighteen Nation Disarmament Committee negotiations up to 1967,⁽⁴⁾ and pointed to the fact that although the two super powers were becoming more conscious of the dangers to the central balance of deterrence if proliferation took place, they still could not put a strategy of non-proliferation at the top of their list of priorities.

(1) Foreign Affairs, January 1956.

(2) Foreign Affairs, April 1961.

(3) The creation of the Eighteen Nation Disarmament Committee was endorsed by the United Nations General Assembly on 20.12.1961 in resolution 1722 (xvi). The Committee has the following membership: Brazil, Bulgaria, Burma, Canada, Czechoslovakia, Ethiopia, France, India, Italy, Mexico, Nigeria, Poland, Romania, Sweden, Union of Soviet Socialist Republics, United Arab Republic, United Kingdom of Great Britain and Northern Ireland and United States of America.

France decided not to participate.

(4) An agreement on this was reached outside the Eighteen Nation Disarmament Committee in Fall 1966.

As has been suggested above, the main concerns about the general dangerous implications of proliferation to the stability of both the central balance of deterrence and of the global international system were voiced by the U.S.⁽¹⁾ The Soviet Union began to share the same general apprehensions only gradually and hesitantly. However, once these fears became common to the two sides, the negotiations in the Eighteen Nation Disarmament Committee were speeded up and the joint draft resolution for the Non Proliferation Treaty was presented to the other members of the committee. Whereas during the first part of the Eighteen Nation Disarmament Committee negotiations on the Non Proliferation Treaty the main bone of contention has been the plans for a Multilateral Force or other plans approximating to it, with the two super powers playing the roles of antagonists while the non aligned tried to compromise between them, the second part was marked by the growing understanding between the super powers (and Britain); and the main point of disagreement was now the various discriminatory clauses in the various drafts. The non-nuclear-weapon states began to stress the differences between themselves as a group on the one hand and the nuclear powers or block members on the other.

(1) One indication of the highest priority given in America to the conclusion of the Non Proliferation Treaty is the unanimous support given to Senate Resolution 179 of 1966 (the Pastore Resolution), which commended the President for his efforts to negotiate an agreement limiting the spread of nuclear weapons. On this particular resolution as such an indication, and also about the priority this problem had in the United States, see inter-alia Curtin Winsor, Jr., 'The Non Proliferation Treaty: A Step Toward Peace', Orbis, Vol. XII, Winter 1967, No.4, pp. 1005-1006.

The significance of this development in the context of the argument here is that the two super powers (and again, but perhaps to a lesser degree, Britain), increasingly accepted the notion which has in fact governed the American main school of strategic thinking from the beginning of the Kennedy Administration, i.e. that the bipolar system can be maintained for a very long time to come and that this system can be stabilised and can also keep the world from major eruptions of violence. But this depended partly on the halting of nuclear proliferation. This realization, or rather this image, of the international system, eventually brought about the endorsement of a common draft of the Non Proliferation Treaty, its acceptance by the U.N., and the great pressures exerted by the nuclear powers on their allies, clients, semi-allies and non-aligned states, first to sign and then ratify the Treaty.

This evolution emphasised that there was a growing realization on the part of the super powers as to their common interests in view of the possibility of proliferation. (There was, of course, another element strengthening their opposition to proliferation, namely the potential possibility of it weakening their power position vis-à-vis the rest of the world - the feeling of membership of the exclusive club etc.⁽¹⁾) This realization contributed to the creation of, and was at the same time influenced by, the image of the international system mentioned above. This

(1) See below pp. 85-86.

new image and realization certainly helped to increase the efforts to stabilise the central balance of deterrence. Thus in a somewhat paradoxical manner, the proliferation of nuclear technology added its contribution to the process of stabilization of the bipolar relationship. It may be argued of course, as indeed it is by Elizabeth Young⁽¹⁾, that the Non-Proliferation Treaty is eight years or so too late and that it is a product of 'optimistic bipolarity' as it were. But this does not change the fact that the new common awareness is here now, and this may contribute to stability as between the two big powers. What they have perhaps lost in the meantime is their ability to impose bipolarity as a comprehensive system, both dominating the global international system and almost identical with it. In other words, they cannot hope any more - as they could have perhaps hoped at the beginning of the sixties - to impose anew a 'pure' bloc system that will cover the great majority of the states in the world and also to control it effectively. What they have gained is the continuation of the process of developing a new system of stable and perhaps closer relations between themselves as super powers, but again not as world powers. This new kind of relationship is different from the continuation of the bloc system. It is rather a new system in which the super powers are approaching closer to each other and working out agreements for the stabilization of their relationship, and at the

(1) The Control of Proliferation: the 1968 Treaty in Hindsight and Forecast, Adelphi Paper No. 56, April 1969, The Institute for Strategic Studies, London.

same time losing a measure of their influence over allies and non-aligned together. Thus, even if the Non Proliferation Treaty is not ratified by some countries, the new images of the system and the realization of the dangers have already had their impact.

A second result of the evolution sketched above is that the process of negotiations itself triggered by the proliferation of nuclear options is also contributing to the creation of a new and calmer climate of relations between the super powers.

Thirdly, the demands by the non-nuclear powers that the super powers will start negotiations to halt vertical proliferation have partly succeeded. They found their formulation in the Non-Proliferation Treaty, article 6, which stipulates that 'Each of the parties to the treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament and on a treaty on general and complete disarmament under strict and effective international control'. It seems quite obvious that, first, this is still far from the demands made by the non-nuclear powers during the negotiations at the Eighteen Nation Disarmament Committee, and, second, that there are good reasons for the super powers to reach such an agreement in any case, even without the prompting of the non-nuclear powers. Such an agreement will have, apart from other consequences, stabilising effects on the central balance of deterrence. The negotiations on these

arms limitations will, in the last analysis, succeed or fail because of the interests or supposed interests of the super powers themselves. But, notwithstanding all these qualifications, it seems clear that the ability of near-nuclear-weapon states to "go nuclear" and the possible readiness of some of them to do just this because of, among other things, the reluctance of the super powers to halt vertical proliferation, has contributed to the decision to start negotiations on this very problem of vertical proliferation. This decision by itself, quite apart from possible agreement, is a contribution to the stability of the central balance of deterrence and also to the general climate of relations between the U.S.A. and the U.S.S.R. as super powers.

This discussion reveals the multi-dimensional effects of the proliferation of nuclear technology. This particular kind of proliferation has on the one hand created a potential for great destabilising effects in the future as far as the global international system, and possibly its various sub-systems, are concerned.⁽¹⁾ At the same time it has contributed in a rather paradoxical way to some processes that may have, and perhaps already have had, some stabilising effects on the bipolar system.

As far as the sub-systems are concerned, the main destabilising effects of the proliferation of nuclear technology (as distinct from the creation of a potential for

(1) On this see below pp. 63-70.

future destabilising elements), could presumably be in (a) starting an arms race; (b) motivating preventive wars. The destabilising effects caused by an arms race fall within the realm of creating a potential for future eruptions of major violence or creating such conditions in which crisis management will be much more difficult.

The second thesis, concerning preventive wars, is even more interesting because it assumes that the proliferation of nuclear technology can directly lead to war. The validity of parts of this thesis can be checked by two historical instances which are detailed below. Theoretically there could be three types of such wars. First, in the situation of a local conflict where one side is a near-nuclear-weapon state and the other is not, or is unable to match the nuclear capability of its enemy, this latter power launches a preventive war in order to destroy the nuclear capability of the enemy. Second, under the same conditions, the power which is less developed in its nuclear capability decides to launch a preventive war not in order to destroy the nuclear capability of the other side but in order to achieve his main objectives in the conflict. The war is launched because of the understanding or assumption that otherwise the balance of power may be changed in a way detrimental to the initiator of hostilities, and he will never be able again to achieve his objectives by force of power. Third, both in a situation of a local conflict and in the case of a conflict in which one of the super powers (or China) are concerned, when a nuclear power decides to launch a preventive war in order to stop a near-nuclear-state

from 'going nuclear', or once this latter has 'gone nuclear' but is only in the first stages of development and has not yet the capability to retaliate against a nuclear strike. In this case, the main purpose of the preventive strike will presumably be to knock out the nuclear capability of the near or new nuclear power, but it may also be to achieve some other objectives, as in the second type of preventive war suggested above. However, this second objective seems unlikely in the case of a war launched by a super-power as in any case the super power is so much stronger than any of the near nuclear states. It may be perhaps more relevant in the case of China vs. India (if the latter decides to manufacture nuclear weapons).

Among pairs of enemies with - though they are by no means equal - nuclear options, India and Pakistan; Israel and Egypt stand out as very remarkable examples. This is for several reasons. First, in both cases there is a long and ferocious conflict. Second, in both cases one side is much superior to the other in its potential nuclear capability. Third, in both cases there have been several violent clashes in the past twenty years, and what is more important, there has been a major war in the recent past. This war occurred after the development of a nuclear option by one side. Is it possible that these wars (or at least one of them) were launched as preventive measures in order to forestall the invocation of a nuclear option?

It seems that in the two crises that preceded those wars (the Arab-Israeli war of 1967 and the Indian-Pakistani war of 1965) the issue of nuclear options played a minor part, if any. In the Arab-Israeli case, the main causes

for the immediate crisis lay within the context of reciprocal miscalculations about the short-range intentions of the various parties to the crisis, Egypt, Israel and Syria. All of them were drawn into a process of escalation by the, then, old and accepted pattern of events of sabotage and retaliation, and the colossal miscalculation of the Russians about the intentions and capabilities of all sides.

On one level were the basic issues of the Arab-Israeli conflict, and the apprehensions of the Arabs about the possible effects of the Jordan Water Project on the future capabilities of Israel. Apart from this, there were the competition in the Arab World and the activity of Fatah⁽¹⁾. The issue of the nuclear options did not appear as one of the causes for starting the crisis nor for the war that ensued. Significantly, too, the declarations of the Egyptian spokesmen also have not referred to it as a direct contributory element to the decision to start their initial moves in the crisis.⁽²⁾ The

(1) See chapter 5; see also Michael Howard and Robert Hunter, Israel and the Arab World, Adelphi Paper No. 41, The Institute for Strategic Studies, London, September 1967; Walter Laqueur, The Road to War 1967, Weidenfeld & Nicholson, London 1968; Charles Yost, 'How It Began', Foreign Affairs, January 1968; Kennett Love, Suez, The Twice Fought War, McGraw-Hill, New York, 1969.

(2) See chapter 5; see also for example, President Nasser's speech announcing his resignation, 8.6.1967; and Muhammad Hassenin Heikal's article in al-aharam on 27.5.1967, among many others.

amount of Arab writing on Israel's atomic plans is vast⁽¹⁾ but it has not been related directly to the causes of the war. One observer suggests that because Egypt was in a way 'losing' in the arms race, she could have considered it in her interest to start a war. However he discounts this as a factor in the crisis of 1967.⁽²⁾ Thus although some Arab writers have discussed the possibility or even the necessity of starting a preventive war against Israel because of fears about the latter's possible nuclear capabilities, this does not seem to have been the immediate cause of the crisis.

The nuclear development in Israel was^{possibly} involved in the causes of the war^{only remotely and} in an indirect way, to the extent that it was at the same time a contributory element to, and was affected by, the conventional arms race, and to the extent that this arms race might have contributed to a general feeling of insecurity in the area. Nuclear development in the Arab-Israeli area has been partly connected, at least psychologically, with the developments in the field of missiles mainly in Egypt and the various meanings attached to this development in Israel.⁽³⁾ Thus it is only by putting nuclear developments within the rather

(1) For a discussion see below Chapter V.

(2) Nadav Safran, 'From War to War', New York, 1969, p.267. In any case Safran refers mostly to the conventional arms race.

(3) See below pp. 222-225; 232-235.

wider field of the arms race that any kind of correlation between this particular development and the war can be established. What one can perhaps add is that nuclear developments in Israel and the conventional arms race in general all contributed to the general feeling of insecurity in the area. Despite this, the whole nuclear issue seems still to be rather marginal in the whole range of the causes of the war. Perhaps the most important argument against the notion of preventive war in this context is that the 'shooting' war was started by Israel. Thus the power that had more cause to start a preventive war within the context of nuclear fears - at least on the basis of evidence available - namely Egypt, was apparently aiming at a diplomatic victory rather than a direct military clash. It was indeed ready to accept war, but may have preferred to secure a simple diplomatic success, a success which would have had no relation to the nuclear capability of Israel, and perhaps would have only encouraged its development.

The Indian-Pakistani conflict and the issue of nuclear proliferation directly connected with it have, as has been suggested above, some similarities with the Israel-Egyptian conflict. The differences are also quite obvious. First, the sizes of all states involved are completely different. Second, in the Indian case there is a third power directly involved, i.e. China, against which most of India's potential nuclear effort would be directed. Third, China is also aspiring not only to become a decisive power in her sub-systems but also to become both a world power and a super power. Thus every conflict in the Indian sub-

continent directly affects a power which is trying to become part of the bipolar system, which China on her part is trying to change into a tripolar system.

However, for the purpose of this discussion about the feasibility of a preventive war against a potential nuclear power, the Indian-Pakistani war of 1965 is of importance. The Indian nuclear programme started a long time before 1965 and indeed there were many rumours and even official confirmations that India would be able to invoke her option in a comparatively short period.⁽¹⁾ In the context of the great tension existing between the two sides such a situation could have had serious implications. The general fear prevailing in Pakistan about the Indian nuclear development found its expression in many newspaper articles. It is significant for example that the former foreign minister Zulfikar Ali Bhutto in his book, 'The Myth of Independence' referred several times to it, and while pointing out the very low degree of industrial development in Pakistan, nevertheless calls for a nuclear development by Pakistan. He writes: 'We are, however, not immediately concerned with the question of a nuclear stalemate. Our problem, in its essence, is how to obtain such a weapon in time before the crisis begins. India, whose progress in nuclear technology is sufficient to make her a nuclear power in the near future, can provoke this at a time of her own choosing. She has already received foreign assistance

(1) See below Chapter II.

for her nuclear programme and will continue to receive it. Pakistan must therefore embark on a similar programme, although a nuclear weapon will be neither a real deterrent nor can it be produced in a few years. We must therefore write it off as a practical deterrent in any conflict with India in the near future.'⁽¹⁾

This, of course, was written after the war of 1965. It is obvious that Bhutto at least regards India as an aggressive power intending and planning to integrate Pakistan into India. In another passage discussing India's basic intentions towards Pakistan, the problem of Kashmir, and the question of nuclear weapons, he writes: 'If the worst were to come to the worst, what would be the consequences of Pakistan abandoning Jammu and Kashmir? It is clear that a compromise of this nature would whet but not satisfy India's appetite and, with her growing military power and possible acquisition of nuclear weapons, she would use these territories as a rallying point for integrating the remaining parts of Pakistan.'⁽²⁾

The question however, is whether these Pakistani fears were among the causes of the war. These causes should be considered within several contexts: on the Indian part there was the growing fear of a combined Chinese-Pakistani front, a fear that had been exacerbated by both the Chinese nuclear experiment and the rapprochement between Pakistan and China of March 1965. This growing understanding between these two erstwhile enemies, and the

(1) See p. 153

(2) See p. 177

possibility of a new push by China towards South East Asia (at least in the image that some Indian decision-makers had of the Chinese intentions), and one which would be conducted by the strategy of 'national liberation wars' and preceded by a Chinese effort to neutralise India - all would endanger India considerably.⁽¹⁾ Thus within the context of Indian-Chinese relations the Pakistani moves were magnified and contributed to a rapid deterioration. By invoking the Chinese threat or potential threat, the Pakistanis only succeeded in exacerbating a process of escalation.

The growing Pakistani fears were concentrated first on the direct relations between India and Pakistan, i.e. as to the future of Kashmir, the feeling being that unless something was done immediately, the Kashmir problem would be settled for all intents and purposes by the Indian fait accompli. The world would forget about it and the super powers would come to accept the status quo. Second were the extensive armament plans India endorsed, plans which Pakistan considered with great alarm. This armament programme and the Pakistani fears should also be considered within the context of the changing relations between India and the two super powers. Since the 1962 Indian-Chinese war relations between India and the U.S.A. had improved

(1) See for example Major General P.S. Bhagat 'Forging the Shield' 1965 quoted by Russel Brines The Indo-Pakistan Conflict 1968, Pall Mall Press, 1968.

considerably and generous military aid had been promised by America and the U.K. Relations between India and the Soviet Union had for a long time been cordial. Both super powers had started to supply India with sophisticated weapons. America and Britain concentrated on equipment for defence against China, while Russia supplied India, among other things, with a factory for producing Mig 21's. Even before this factory went into production, Russia started to supply India with Soviet made Mig 21's. Already by the Autumn of 1965 India had 12 of these planes⁽¹⁾.

At the same time the Indians were also very concerned about the American weapons that Pakistan had, mainly the Patton tanks. Thus fears about present and future armament programmes were prominent on both sides. Pakistani fears were concentrated on the future situation while the Indians were concerned with the state of affairs in the present. These Indian fears concentrated upon the quality of the Pakistani weapons, quality rather than quantity. Quantitatively, India was superior, although this superiority was partly cancelled by her need to divide her forces between two fronts (the Chinese and the Pakistani). Ostensibly this difference should have led to a Pakistani preventive war, which indeed in a way was the case. However, this was not directed against the possible future change in the balance of power and also not against the nuclear

(1) See on this and the other material about the causes of the war, Russel Brines 'The Indo Pakistani Conflict', op. cit.

capability of India, but rather in the hope of accomplishing a very limited objective, i.e. solving the Kashmir problem in a way advantageous to Pakistan. It was India which decided to escalate the conflict beyond these limitations and to achieve by this very escalation a more comprehensive military victory, which would perhaps prove to Pakistan that the Balance of power even at the time of the war was favourable to India.

The problem of nuclear options was certainly always there in the minds of the Pakistanis, but played a smaller role within the context of the immediate motives for the war.⁽¹⁾ It was part of the general complex of fears about the future and not an independent direct cause for attack.

The two wars also show that the real 'shooting' in one case, and the escalation into general war in the second case (India-Pakistan), were started in both cases by the powers which were both stronger in conventional armies and which also enjoyed a much higher level of nuclear development. This does not say much about the motivations in starting the wars. In the case of Israel, it was not pre-meditated war but a reaction once the crisis escalated, and the same pattern applies to India. Furthermore there is always a gap between the images that a power has of itself and objective reality, and this certainly existed in both cases, i.e. both Israel and India exaggerated the capabilities

(1) It is interesting that in his political autobiography, Ayub Khan while discussing India's rearmament programme, never mentions India's nuclear development. His book ends in mid-1965, and so he has no comments on the causes of the war. See 'Friends not Masters', especially chapters 9 & 10.

of their enemies. What is important, however, is that India and Israel were both stronger, and yet still found it necessary to escalate the crisis. The possibility of a preventive war against the nuclear potential of both of them seems therefore an even remoter explanation for the two wars.

Where the danger of preventive war within the context of nuclear proliferation does emerge is perhaps as between a near nuclear weapon state and its nuclear enemy. The obvious cases are Russia against Germany; Russia or China against Japan in the case of a decision by the latter to 'go nuclear' and also to abandon at the same time her military pact with the U.S.: and China against India. This is at least the situation at the time being.

One has to draw a distinction of course between near-nuclear-weapon powers which have military alliances and guarantees from big powers and those which do not enjoy this luxury.⁽¹⁾ A different question of course is whether a super power will be ready to retain its guarantee if its ally does become a nuclear power. This would depend on the general climate regarding nuclear proliferation at the time. Although the Non-Proliferation Treaty has not yet come into force the climate of attitudes among the big powers is still such that it seems inconceivable that a super

(1) The clear line of such a distinction is somewhat eroded by the American, Soviet and British guarantee, through the Security Council, for support to states party to the Non-Proliferation Treaty, which are threatened or attacked by nuclear weapons. (Resolution 255 of the Security Council (1963)).

power would be ready to accept such a development with equanimity. Thus within the present context of political relationships both within and outside the alliances, it seems hard to believe that nuclear proliferation could take place within the alliances without affecting considerably the nature of super power guarantees. Outside the alliances system the danger of preventive war launched by a nuclear power against a new nuclear power in its first stages of nuclear weapons development seems more possible.⁽¹⁾ The kind of political context in which the relations between Germany and Russia are conducted and the emphasis put by Russia on the issue of possible proliferation to Germany, suggests that a preventive strike by Russia against a newly nuclear Germany is more than a remote possibility. The kind of relations between both Russia and China on the one hand and Japan, on the other hand, and between China and India, tend to suggest that in both cases the danger of a preventive war (in case of either Japan or India going nuclear) launched by China in the case of India, or Russia and/or China in the case of Japan is again comparatively limited. The dangers will lie mainly in the inability of these newly nuclear powers to constitute in the long range a stable balance of deterrence between themselves and China or one of the super-powers. The case of West Germany is different because of the special fears and apprehensions of Russia and also because the central balance of deterrence will be affected by her (West Germany) becoming a nuclear power, much more so than in the case of any other power. Here

(1) Cf. Hoffmann op. cit.

the distinction between nuclear proliferation in Europe, which is still the main area of bipolar relationship, and proliferation in other parts of the world is significant.

Apart from the growing reluctance of the super powers to take upon themselves new commitments in other parts of the world, (unless they come under great pressure by their clients or allies - as is now the case in the Middle East - and even then only with great reluctance and continuous attempts at achieving mechanisms for crisis management), they are also at present creating for themselves the option not to become entangled in dangerous situations which might arise outside Europe. This caution, which admittedly might not necessarily be shared in equal proportion by the U.S. and Soviet Union, could enable them to withstand many of the probable effects of nuclear proliferation in some regional sub-systems outside Europe. A priori it could be argued that a symmetrical decision by the super powers to withdraw from a certain sub-system in which proliferation took place, would ascertain the continuation of the overall stability of their nuclear strategic relationship.

The problem of symmetry is therefore crucial here. It could be argued again that within this context, a symmetry in the actions of the super powers would depend to a large extent on the symmetry (or lack of it) of the development of the nuclear options in the hands of the local powers in the sub-system itself. If for example a pair of local enemies 'went nuclear' at the same time, the

super powers would have the option to decide to withdraw simultaneously from the same region, once they felt that there was a high likelihood of escalation resulting from the destabilising effects of the existence of nuclear weapons in the area. The current move towards less control by the super powers in the world and the partial fragmentation of the international system, only shows that the option for simultaneous withdrawal from areas affected by nuclear proliferation is not out of step with the current trend.⁽¹⁾

A different development could be assumed in case of asymmetrical proliferation in a regional sub-system. If only one state out of a pair of local enemies 'went nuclear', the pressure on the super power patron of the opposing local power to become further involved in the local conflict, would become very strong. Such an involvement - which would probably take the form of guarantees - would probably create great pressures on the other super power to become involved in a symmetrical way. Thus an asymmetrical proliferation might result in greater commitment of the super powers in the sub-system. Such an involvement might result either in some kind of a crisis management mechanism as between the super powers plus some kind of strict control over the local nuclear powers, or

(1) For a more detailed description of the possible future super powers' configurations in case of nuclear proliferation in one sub-system, see below Chapter 6.

conversely it might result in an international crisis and thus endanger the stability of the super-powers' relationship. Still another possibility is that the super power whose ally is inferior in nuclear development, would refuse to become drawn into an overcommitment, even in face of asymmetrical proliferation.

The effects of limited proliferation in a regional sub-system, on the super powers' relationship could be quantified in the following way⁽¹⁾: symmetrical proliferation, high probability of no effect on stability of the central balance of deterrence; asymmetrical proliferation, three equal possibilities; super power affected (ally of inferior local power), choosing not to intervene; two super powers intervening (first the ally of inferior local power and then consequently the other one), but creating a stabilising mechanism (either by control over local powers or through an agreement to withdraw jointly from the area once escalation started or still not to intervene once escalation started); super powers' involvement by extending guarantees, without working out mechanisms of control or crisis management. In the first two of these three possibilities, the central balance of deterrence would not be destabilised.

A different set of dangers to the stability of the super powers relationship might come if the new nuclear powers outside Europe (as for Europe see above) were trying to play an independent role in the global international

(1) This quantification has only heuristic value.

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system. This was the case with China and might be in the future the case with Japan. Here the main danger is related to the growing difficulties in the process of decision making in both super powers in case of a crisis between them, a crisis in which Japan or a similar power might become involved or at least in which the possibility of such involvement must be taken into account. Here Zoppo's⁽¹⁾ argument is certainly valid, but with three major qualifications: (a) the experience of SALT proves that the super powers can maintain a system of communications and consultations about their strategic capabilities and doctrines and thus on the one hand achieve such information as would enable them to assess more rationally and accurately their mutual moves in times of crisis, while on the other hand create a basis for some form of permanent mechanism for planning strategic moves in times of crisis; (b) the development of various ABM systems would again lessen the uncertainties of the super powers about the threat of such a new nuclear power, in case of a crisis between the super powers; (c) the great development in the field of detection and satellite intelligence would supply the super powers with a host of information about the delivery systems of this new nuclear power and thus again lessen the uncertainties of the decision makers.

Whereas the effects of proliferation in the sub-systems, on the central balance of deterrence could be

(1) See Zoppo op. cit.

destabilising only in some limited cases, and which the super powers already control, and can further devise, mechanisms to overcome some of these contingencies, the outcome might be different for the local powers themselves. Both symmetrical and asymmetrical proliferation in some sub-systems might result in critical destabilisation of the local balances of power.⁽¹⁾ Decision making processes would become much more complex, there would be great systemic pressures on the local powers, and the structure of relations inside each sub-system might change.

One of the indicators of growing fragmentation in the international system of today is the emerging polycentrism in the global international system coupled with increasing multipolarity inside each sub-system.⁽²⁾

Asymmetrical proliferation to small and medium powers in sub-systems, powers which are not aspiring to competition with the super powers, a proliferation which leads to super power involvement, might partly change this development in the sense that the local powers change their respective sub-systems into polycentric ones. At the same time such a trend would lead to some revival of bipolarity in the

(1) For a comprehensive discussion of such effects in case of mainly symmetrical proliferation in the Middle East see Chapter 6.

(2) The terms polycentrism and multipolarity are used here in the sense that Hoffmann gives them, see Hoffmann op. cit.

global international system, a revival however, which would not affect all the regional sub-systems.⁽¹⁾

Symmetrical proliferation in regional sub-systems might increase polycentrism in the global international system and lessen super powers influence over parts of the world. At the same time it could possibly create local bipolarities inside sub-systems affected by proliferation. Further proliferation inside sub-systems beyond pairs of local enemies, might create hierarchical systems inside these sub-systems, and probably have further destabilising effects on the local balances of power. The process of fragmentation in the global international systems would probably go on in such a case.

(1) For another model see Chapter 6.

THE USES OF NUCLEAR OPTIONS

In most of the literature on the problems of nuclear proliferation, the phase of being a 'near-nuclear-weapon state' or potential nuclear power, is considered transitory. (The status of a 'civil nuclear power' is considered more permanent.) The writers are interested either in a particular state's motivations for 'going nuclear' or in the likelihood of its 'going nuclear', or in ways of stopping this process. There is however only a limited study of one central problem: what are the strategic and diplomatic uses of the nuclear options themselves? namely, how could a state use its options, either tacitly or overtly, for the purpose of diplomatic or strategic bargaining.⁽¹⁾

That nuclear options have already been used as bargaining counters in diplomacy, is well enough known, although because of the nature of diplomatic practice, the knowledge is not detailed. Some of the examples for this practice in the past will be cited in this chapter. On the basis of this past practice, and because of two principal reasons, listed below, it could be argued that nuclear options will be used in the future as instruments of

(1) This problem is mentioned, for example, although quite briefly, by Kurt Gesteiger, 'Nuclear Prospects and Foreign Policy', Survey, January 1966. On the case of Israel in this context, see a brief reference in Leonard Beaton, 'Why Israel Does Not Need the Bomb', The New Middle East, April 1969; see also, Aubrey Hodes, Dialogue With Ishmael, Funk & Wagnalls, New York 1968, Chapter 13.

bargaining in strategy and diplomacy. The reasons are:

(a) The Non-Proliferation Treaty acts as a holding operation against further proliferation, but at the same time it is not capable of keeping the signatories very far from the stage of becoming fully nuclear - if they so wish it. They will decide what stage of their nuclear development they will reach according to their national interests (or rather the way in which they perceive their national interests), the success and comprehensiveness of the inspection system, and super-power pressures and accommodation. The way is open for them to go on building a certain capability which is not directed exclusively at weapons' production, but could still serve this purpose after a political decision was taken. They can also decide to opt out of the Non-Proliferation Treaty altogether according to article 10(1).⁽¹⁾

Thus the Non-Proliferation Treaty does not cancel the nuclear options of near-nuclear-weapon states. In order to prevent these options from being invoked in some circumstances, there is a need for constant attention to be paid by the powers which find it in their interest not to allow

(1) The text of this article runs as follows: 'Each Party shall in exercising its national sovereignty have the right to withdraw from the Treaty if it decides that extraordinary events, related to the subject matter of this Treaty, have jeopardised the supreme interests of its country. It shall give notice of its withdrawal to all other Parties to the Treaty and to the United Nations Security Council three months in advance. Such notice shall include a statement of the extraordinary events it regards as having jeopardised its supreme interests.'

further proliferation in general, and/or in particular cases. Indeed, the Non-Proliferation Treaty 'codifies', in a manner of speaking, the status of the nuclear option and thus keeps open the possibility of using the option as an instrument of pressure. Moreover, once the Treaty became operative, the action of any party in opting out might jeopardise the whole anti proliferation strategy, much more than if the same party had never adhered to it in the first place. Such opting out might create a chain reaction; might create doubts as to the whole validity of the Treaty and might encourage near-nuclear-weapon states which refused to become parties to the Treaty in the first place, to invoke their option without undue fear of sanctions. Thus the effort to keep the Treaty a going concern, must be carried on, and although the non-proliferation strategy scored an important success with the accomplishment of the Non-Proliferation Treaty, the task has not ended and in some ways became more complicated.

(b) It appears at present that those powers that refused to adhere to the Non-Proliferation Treaty, are still reluctant to 'go nuclear'. This is mainly because of strategic, political and economic⁽¹⁾ reasons rather

(1) On the economic problems involved in the development of an Indian nuclear deterrent, see for example Major General D. Som Dutt, India and the Bomb, Adelphi Paper No. 30, Institute for Strategic Studies, London, 1966.

The problem of how to finance a nuclear deterrent becomes more and more the problem of how to finance the production of the delivery systems and of the command and control system, rather than that of the production of the nuclear warheads. Here a distinction could be made between those potential nuclear powers whose opponents are the super powers or China

than super-power pressure. There is therefore a high probability that many states will have nuclear options open, and even if they are reluctant to 'go nuclear' will at the same time be unwilling to forgo their options, and realise increasingly the potential benefits to be derived from these options.

In the past nuclear options have been developed, at least in the first stages, without the intention that they could eventually serve as instruments for bargaining or threats.⁽¹⁾ The realisation that these options could be useful as bargaining counters grew gradually. It could therefore be argued that in the future, powers might decide to develop a nuclear option, partly in order to use it as such a bargaining instrument.

What is a Near-Nuclear-Weapon State?

It seems easier to define what is a nuclear power than to define a near-nuclear-weapon state, though even in

Footnote continued from previous page

on the one hand, and those which face only local enemies. For the first category, the financial price is much more severe, than for the second one.

On price estimates of different nuclear capabilities, inclusive of the delivery systems, see Report Of The Secretary-General On The Effects Of The Possible Use Of Nuclear Weapons And On The Security And Economic Implications For States Of The Acquisition And Further Development Of These Weapons, UN Secretary-General Report A/6858, 1967.

- (1) One of the first and still best analyses of the rationale for the nuclear development in six of the potential nuclear powers and three actual nuclear powers, is included in Leonard Beaton and John Maddox, The Spread of Nuclear Weapons, London, 1962.

the former case there are ambiguities. The problem is compounded by the introduction of the concept of a 'civil nuclear power', which is defined more by the political intentions than by capabilities.

Heurlin⁽¹⁾ suggests one definition of what is a nuclear power: 'a country which is recognized - on account of its nuclear weapons' tests - to possess one or more nuclear weapons which must be presumed available for independent use in an armed conflict.' The Non-Proliferation Treaty defines a 'nuclear-weapon-state' as '...one which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to 1 January 1967'.⁽²⁾ The Treaty is careful to note that this definition was formulated 'For the purpose of this Treaty...'⁽³⁾ The differences between the two definitions are: (a) the operative date (in the Treaty this was fixed at 1 January 1967); (b) the Non-Proliferation Treaty includes the test of a nuclear device as one of the criteria for securing the status of a nuclear power. Both definitions have their

(1) See Bertal Heurlin, 'Nuclear Proliferation', Co-operation and Conflict, III-IV, 1967.

(2) Article 9(3) of the Treaty.

(3) ibid.

advantages and disadvantages. Ostensibly the definition in the Non-Proliferation Treaty is more useful for the following reasons: First, as the technology of the bomb is less complicated than the development of the missile material, it could be taken for granted that once a test on a device was carried through, the state concerned had already mastered the technology of the bomb or was very close to it. Second, for states which have a high level of nuclear potential, the main obstacle to 'going nuclear' is political. Once a test was carried through, the political intentions would become clear. Indeed the test would be in any case in defiance of the Test Ban Treaty (provided it was not conducted underground), and of the Non-Proliferation Treaty as well, and this clearly suggests the political decision to go ahead with a nuclear weapons programme. There would not be any reason why this particular state should refrain from this once the test was conducted and thus incur reactions from the international community in any case. Third, precisely because nuclear weapons are in the first place deterrence instruments, and because the technology of the bomb is not an unsurmountable obstacle, once a test was conducted, nuclear threats by the tester will already have some credibility.

At the same time, it could be argued that only the actual possession of the bomb could make a state a nuclear weapon power, in the sense that only then could this state, according to circumstances, deter another nuclear power. The definition of the Treaty will cover this contingency

only if the test of a device was sufficient to create enough uncertainty in the mind of the nuclear opponent as to whether the tester already had the actual weapons. This only shows that in different circumstances, the notion of a nuclear power could be defined in different ways. Indeed, there are more examples which show the possibility of different border cases between nuclear-weapon states and near-nuclear-weapon states. One case may be that in which a state explodes a nuclear device in order to indicate to other states that it may still consider the possibility of not proceeding with its nuclear programme if certain demands were met. The exploding of the device is used as a signal in a bargaining process. However, in view of the enormous effort needed to make a decision in defiance of both the Non-Proliferation Treaty and of the Test Ban Treaty, it seems safe to assume that the state carrying out the test, is willing in any case to go ahead and produce nuclear weapons notwithstanding any concessions which might be offered to it. The position might be somewhat different if the Non-Proliferation Treaty were to disintegrate because many states decided to opt out of it, and hence the situation had become more fluid.

An intriguing question is whether a state could be considered nuclear if it declared that it possessed a nuclear weapon but did not want to test it because it was a party to the Test Ban Treaty or the Non-Proliferation Treaty (in the second case assuming that it had developed this device before becoming party to the Treaty), or, again,

because of technical reasons (lack of testing sites) or because a test was not in its interest at the time. It might add that it was ready to submit the weapons for inspection, for the sole purpose of proving this capability. A similar problem would be posed by states which adhered to the Non-Proliferation Treaty, declaring at the same time that they had already produced one or few nuclear weapons, but were now ready to adhere to the Treaty. Thus a power which had, in fact, nuclear bombs could be considered as a non-nuclear power according to the Treaty and might even adhere to it.

In order to account for such situations the definition of a 'nuclear-weapon-state' could be widened as follows:

"A 'nuclear-weapon state' is one which has manufactured a
 • nuclear weapon, tested it, or tested a nuclear device, or proved that it has a nuclear weapon, which must be presumed available for independent use in an armed conflict." (1)

This discussion and the examples given, only serve to show that the definition of a 'nuclear power' might change according to circumstances and also according to the uses required of the nuclear capability. In some cases deterrence

(1) Another and more restrictive definition is suggested by Wibrich who argues that three elements are needed: possession of nuclear weapons, capability for independent decision on the uses of it and effective delivery systems. See Mason Wibrich, 'Guarantees for Non Nuclear Nations', Foreign Affairs, July 1966.

may be secured at even a low level (explosion of a device or acquiring nuclear weapons without testing them). In some (and perhaps most) cases, this would not be sufficient and could possibly^{be}/even counter-productive.

What then is a 'potential nuclear state' or a 'near-nuclear-weapon state'? Here a distinction should be drawn between capabilities and intentions, or in other words, between 'civil nuclear states' and 'near-nuclear-weapon states'. A definition based on capability would be: "A potential nuclear state (comprising both sub-divisions) is the one that has an independent plutonium production capability sufficient to produce one or more bombs per year, or is working on it and is close to achieving it, and which has the minimum independent scientific, technological and financial capability to master problems of bomb technology and delivery systems (either by self production or by acquisition)." In this context "Independent" means "without outside control". As plutonium production is more open to outside observance whereas bomb technology could be developed in complete secrecy, the definition includes a clause on the objective conditions of the productive potential rather than active work on the production. This definition covers of course both 'civil nuclear states', and 'near-nuclear-weapon states'. The division line between them would be through the introduction of a clause dealing with the political intention. Thus a 'near-nuclear-weapon state' would be the one with the capabilities defined above and "...which has the intention of possessing a nuclear weapons capability, or at least considers it as a possibility, or is assumed to have such an intention."

Wilrich⁽¹⁾ bases his definition of a "potential nuclear state" only on capabilities, with the amendment that one should take into consideration outside help as well.

Beaton discusses twelve states which have sometimes been suggested as possible potential nuclear states (Canada, West-Germany, Japan, Sweden, Italy, Switzerland, Belgium, Netherlands, India, Israel, U.A.R., and Czechoslovakia). There have been some indications that some East-European countries are now developing some 'civil nuclear capability'.⁽²⁾

For the purpose of this discussion the term 'near-nuclear-weapon state', which will cover 'civil nuclear states' as well, will be used. However, pure 'civil' nuclear states have less ability to exert pressure by virtue of their nuclear options than have the near-nuclear-weapons states.

(1) ibid.

(2) See Jugen Notzold, 'Nuclear Energy in East Europe', Europa Archiv, No. 21, 1967, republished in Survival, March 1968.

Martin and Young write "If nothing is done, this process may be expected to continue indefinitely. Proliferation has reached a stage where India could achieve a first fission test within eighteen months from the decision taken, Canada within two years, West Germany within three years, Israel, Sweden, Italy and Japan within five years, and Czechoslovakia, East Germany, Roumania, Yugoslavia, Poland, Belgium, the Netherlands, Australia, South-Africa, Pakistan, and possibly Indonesia and the U.A.R. within ten." See Andrew Martin and Wagland Young, "Proliferation", Disarmament and Arms Control, 3(2), 1965.

It appears however that this prediction should be qualified in several ways, and in any case does not take into consideration other factors affecting the political decisions of various states.

As has been suggested before, some near-nuclear-weapon states have already used their nuclear options - and will presumably do more so in the future - as bargaining counters. They use these options as instruments either to compel other states to do something, or to deter other states from doing something. Thus two analytical concepts used in strategic theory could be applied here, namely deterrence and compellence.⁽¹⁾ But whereas in strategy, deterrence and compellence are used in connection with the threat of a possible violent action involving military force, in the model suggested in this chapter, they are used in connection with the actual or implied threat to create a tremendous instrument of violence, namely a threat to produce nuclear weapons. As the nuclear options can serve as instruments of bargaining (both for deterrence and compellence purposes), in both strategy and diplomacy, the following discussion presupposes that deterrence and compellence, although being strategic concepts, could be used in the study and analysis of diplomatic practice as well.

The model suggested below, like other strategic concepts and models, has among others, three significant characteristics - all of them doing some violence to reality:

(1) For the definition of the second concept, see Thomas Schelling, Arms and Influence, Yale University Press, 1966. For an elaboration of this concept in connection with the use of nuclear options, see Appendix I.

(a) it assumes rationality on the part of the actors, and rationality of a particular type; (b) it is a behavioural model; (c) it is a 'situational model'.⁽¹⁾

Categories of Near-Nuclear-Weapon States

The first distinction should be made between those states which are known to have decided to 'go nuclear' notwithstanding any pressures or arguments against such a step and those which have not yet made up their mind. To the extent that such a decision is made public and in unequivocal terms, the state taking it would lose its bargaining power vis-à-vis states which have either a general interest in halting proliferation or a particular interest in halting this particular state from 'going nuclear'. The entry into force of the Non-Proliferation Treaty makes this distinction clearer. It could be assumed that those states which ratified the Treaty or joined it, certainly belonged to the second group of states. At the same time, the fact that a state has not become Party to the Treaty does not mean necessarily that it has decided to 'go nuclear', but rather that it keeps its options open on a higher level than is the case with states adhering to the Treaty. (As has been suggested already even states which adhere to the Treaty keep the option open but under greater technological and political restrictions.)

(1) On 'situational models' see Karl Deutsch, The Nerves of Government, Glencoe Ill., 1963, pp. 12-13.

Thus since the Treaty entered into force, there have been two categories of near-nuclear-weapon states with - theoretically - a third: (a) near-nuclear-weapon states which had become Parties to the Treaty; (b) near-nuclear-weapon states which had stayed out of it but had not declared a decision to 'go nuclear'; (c) near-nuclear-weapon states which had decided to 'go nuclear' but had still not done so, (at present no state has declared that it has taken this decision).

States opting out of the Treaty according to article 10(1), will join either category (b) or (c) according to the language they use and the actual steps they have taken. In a way it could be argued that a state acting according to article 10(1), might be considered as moving right ahead into category (c), even if it did not indicate an intention to 'go nuclear'. To make such a far-reaching decision as opting out according to article 10(1), a decision which would undoubtedly bring about great pressure by the super powers and the international community on the particular state, is perhaps justified only when the state in question really intends to produce nuclear weapons. At the same time it is possible to envisage a situation in which a state decides to act according to article 10(1), without as yet making the final decision. By opting out of the Treaty, the state hopes to bring pressure to bear on either the super powers or other powers and also (on some occasions) to shorten the lead-time between a political decision and the actual production of the bomb.

The category of near-nuclear-weapon state is therefore a very wide one, permitting many intermediate situations and possible bargaining counters. Pressure could be exerted by the near-nuclear-weapon states on the super powers or other powers, and conversely by these latter powers on the near-nuclear-weapon states about the possibility of 'going nuclear'. The outcome of these pressures depends on the particular set of circumstances of every state, on the patterns of pressure, and the nature of a possible quid pro quo.

There are two differences between the threat to 'go nuclear' and the threat to use force: (a) the results, and this is quite obvious; (b) the length of the process between the threat and its implementation. The process of bargaining about a decision to 'go nuclear' would be longer than in the case of the threat of force. There is always a certain time-lag until a test could be conducted, during which time bargaining can go on. Moreover, the possibility remains of continuing this bargaining after the test of a device and before production of the bombs. The use of force on the other hand is usually the end of a certain vital process of bargaining although on many occasions the process of bargaining goes on even there. (1)

(1) The doctrine of "limited strategic war" envisages the delivery of one or few bombs as part of a bargaining process.

Categories of states against which the threat to 'go nuclear' can be applied

The threat to 'go nuclear' for purposes of deterrence and compellence can be directed against three categories of states but can also affect another category. The first three categories are: (a) The two super powers, which in their role as world powers have a vested interest in halting proliferation. The United Kingdom was also very active in promoting the Non-Proliferation Treaty. However, because of the limited resources at her disposal, it is probable that her ability to bring pressure to bear on the one hand and to give certain concessions to the near-nuclear-weapon states is very limited.

The super powers are concerned about nuclear proliferation, primarily because of two reasons: (a) it poses a limited threat to their overwhelming control of nuclear power (although it is hard to envisage any new nuclear power which could match this preponderance); (b) it might affect the stability of the bipolar system. As has been pointed out in Chapter I, the destabilising effects on the bipolar system as a result of proliferation, are possibly less critical than has been usually suggested, as the super powers can develop strategies and policies which would allow them in many cases either to manage crises or to disengage from those parts of the world in which proliferation took place. However, this does not yet appear to be the way in which decision makers in the super-power governments look at proliferation, and in any case some of the effects could indeed be destabilising to

the bipolar system. Such, for instance might be the case of asymmetrical proliferation in a sub-system, in which the super powers are already deeply involved and committed. The problem however will remain as to what priority each super power attaches to anti proliferation strategy. Their position might vary from time to time and may not be symmetrical.

One of the interesting problems is whether new members of the "nuclear club" will share the same interest as the first three nuclear powers in halting proliferation. At present, it seems that China and certainly France have drifted away from their enthusiasm for proliferation and are developing a tacit shared interest with the first three at least in not encouraging it. However, although they may perhaps be content that proliferation has not yet occurred, they are not likely, for a very long time to come, to do anything positive about it. The Chinese attitude could be summed up as being on the declaratory level, in favour of proliferation (to 'peace loving countries'), but not ready to supply actual weapons to other countries.⁽¹⁾ Although France has not become Party to the Non-Proliferation Treaty, she has made it clear that she will act according to its spirit.

(1) On the Chinese position, see Walter C. Clements Jr. The Arms Race and Sino-Soviet Relations, Stanford, 1968, especially pp. 127-135.

It is difficult to speculate about what the attitude of new nuclear powers will be. Attitudes on proliferation may very well change if one's own country becomes nuclear. The reservations of several members of the Eighteen Nation Disarmament Committee on the Non-Proliferation Treaty are not sufficient proof as to what may be their actual attitude if, indeed, they do 'go nuclear'. In any case, as has been suggested in regard to Britain, it is inconceivable that any of the newly formed nuclear powers will be in the position of the super-powers in having the interest and the resources to take action about a near nuclear power which threatens to 'go nuclear'. They may have these interests, if they are directly involved with this "near nuclear" state. But in that case the relationship will be different in type and intensity. They will not act as world powers, a role the super-powers are playing now, but in a different manner and will actually belong to one of the rest of these categories.

(b) A nuclear enemy. At the present time this will mean enemies of one of the members of the nuclear club. In future it may mean more (if more states 'went nuclear'). At present there could be three possible sub-categories here: (1) The nuclear enemy being one of the super-powers. Two possible examples are Germany and Japan with the Soviet Union as their enemy. In that case the threat will affect the bipolar system. (2) The enemy being China - namely, a power which aspires to become the third super-power and a world power. Here, the threat may involve the two super-

powers, but again in a different capacity, as it will not necessarily be part of the central balance of deterrence. This might be the case if the possible near-nuclear-weapon state is India, and later on Australia as well. (3) The enemy being France or Britain.

The 1967 French strategic doctrine as stated by General Ailleret⁽¹⁾ puts France as a possible enemy outside the framework of the central balance of deterrence. If developed to its logical conclusion it could bring about a situation where France, like the two super-powers, would become involved in conflicts all over the globe, and thus may regard development of new independent nuclear forces as possible threat to her. The new strategy actually assumes future proliferation and the possibility of threats towards France from all "points of the compass". In this respect France puts herself voluntarily in the place of the super-powers, in their roles as world powers, but without the capabilities the latter possess. If France (and possibly other nuclear powers in her category) became involved in a conflict with a medium or a small nuclear power, she would be much more vulnerable to a nuclear threat. She would not have ABM systems and would not be able to count on tremendous nuclear offensive systems such as the super-powers possess.

(1) See 'Directed Defences', Survival, February 1968. The original article, by General Ailleret was published in Revue de Défense Nationale, December 1967.

One tends to assume that this French strategic doctrine was designed more as a political symbol, namely, to bring home the message to both America and Russia about the basic change in France's political posture, than as a real strategic change. Another possible explanation is that France, which is trying to develop a more active policy in Asia and Africa, wanted to back this new political activity with more military options. A third possible explanation was the will to back future political initiatives in Europe itself. One or more of these explanations may be correct. In any case, since M. Pompidou became President, the emphasis on a world role for France has been somewhat muted.

(4) If more near-nuclear-weapon states 'went nuclear', new pairs of nuclear enemies would emerge. (e.g. India and Pakistan; Israel and the U.A.R.; Australia and Indonesia, etc.). A preliminary phase may be that in which one state 'went nuclear' while the other remained in a near-nuclear stage. It is obvious that the nuclear power could use its newly acquired capability to obtain something from its unfortunate adversary, but the near-nuclear state could also use its option as an instrument of threat against its adversary. Eventually, if limited proliferation takes place, this type of conflict (that is to say, between a local nuclear power and a local near-nuclear-weapon power) will become more common.

(c) Near-nuclear or non-nuclear enemies. In local conflicts this may be the most common situation, and certainly it is so at present. Pairs of enemies like

India and Pakistan, Israel and the U.A.R. will, for a long time, remain the main examples of the strategy of near-nuclear powers. If indeed Australia developed the nuclear capability, the same situation may perhaps arise eventually between her and Indonesia.

A fourth category includes those states which might be affected by a decision to 'go nuclear' of another state, but against which no such threat was made. These are states which are in the same sub-system with the near-nuclear-weapon state, but which hitherto were in no direct conflict with it. Nevertheless they would have some cause for concern if that power 'went nuclear'. Thus for example, a power like Turkey might become somewhat concerned if Israel or Egypt 'went nuclear' and this might bring about a change in the perceptions Turkish decision makers have of the intentions and policies of the states which 'went nuclear'. One of the possible results of such developments is that neighbouring states might decide to reorientate their policies so as to be less involved in the sub-system, or to join military alliances outside the sub-system. Thus proliferation inside some sub-systems might bring about the adding of actors in the sub-system or conversely the contraction of it.

India has a substantial nuclear potential. It was suggested by Nehru in 1962 that India was '...more highly developed in nuclear energy than China'⁽²⁾, an assertion which with hindsight appears to be somewhat optimistic.⁽³⁾ However, India developed only a plutonium capability whereas China concentrated on Uranium production. This gave China a lead in the field of weapons programmes, while India decided time and again either not to produce nuclear weapons or to postpone such a decision. This position was probably modified recently. The new Indian nuclear programme is aimed at the creation of a very elaborate nuclear option which could - if exercised - create a credible deterrent to Chinese nuclear power. The new plan envisages an elaborate development in the field of weapons grade uranium and rocketry. However, the decision to invoke the option could be postponed for three or four more years.⁽⁴⁾

One of the major reasons for India's refusal in the past to 'go nuclear' was the very strong position taken by Nehru against nuclear weapons in general, a position shared by the majority of the political elite

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- (1) Only uses vis-à-vis the super powers are discussed here. The uses of the option vis-à-vis China and Pakistan need a separate detailed study.
- (2) Speech in Lok Sabha, as quoted by The Hindu, 15.8.1962.
- (3) For the Indian present capability see inter alia table 4 in R.L.M. Patil, India - Nuclear Weapons and International Politics, Delhi 1969, p.32.
- (4) See on this the various articles in The Institute for Defence Studies and Analyses Journal, New Delhi, July 1970.

until the mid sixties.⁽¹⁾

Precisely because of this strong position, it could have been expected that the effectiveness of the option as a bargaining counter might have been diminished. However, because at the same time India persisted in developing a considerable nuclear potential, the possibility of a military programme could not have been ruled out. Thus for example, even Nehru himself in a speech in 1962 in the Lok Sabha⁽²⁾ said: "China may have an atom bomb, but broadly speaking, I think we are not thinking of the atom bomb. We are more highly developed in atomic energy than China is. That does not mean that China cannot produce an atom bomb before us, because we are not trying to do so... If they (Chinese) have an atom bomb, they will not let it loose in India, but they will keep it for other purposes. If they do let it loose in India, it will be worse for them...' Which incidentally might mean either that India will not 'go nuclear' under any conditions, or conversely that if China did attack India, the latter might as a result, go nuclear. If the second interpretation is valid then the threshold for an Indian decision to 'go nuclear' was put by Nehru at a very high level, namely, an

(1) For an extreme position on this issue see Krishna Menon's attitude in his extensive interviews with Michael Brecher. See Brecher, India and World Politics, Oxford University Press, 1968, pp.228-233.

(2) Quoted in The Hindu, 15. 6. 1962.

actual Chinese nuclear attack on India.

The bargaining counter created by India's nuclear capability, resulted in at the beginning at least, from the suspicions of the rest of the world about India's intentions. The construction of a chemical separation plant only helped to increase these suspicions. India's contention that she was not planning to 'go nuclear' helped somewhat to calm outside suspicions, but still left India with a potentially important bargaining counter.

The situation changed after the first Chinese explosion in October 1964. On the one hand there was a tremendous outcry in India, and a strong body of opinion began to demand that India should 'go nuclear'. Indeed, from that time onwards, this issue never left the arena of public debate and an important school of thought emerged which favoured an Indian independent nuclear deterrent. This school evolved a coherent and elaborate set of arguments to substantiate its position. On the other hand another school of thought insisted on the need for a search for some sort of outside nuclear guarantees. The Indian government declined to make a decision in favour of the 'bomb', but gradually moved towards a much more flexible position than was the case before the first Chinese test. At the same time it started considering the possibility of some kind of international guarantees which would be compatible with India's general foreign policy stance.

Within the context of this public debate and against the background of repeated Chinese tests, the Indian nuclear capability assumed greater importance as a bargaining counter.

The use of the option vis-à-vis the super powers

There have been over the years three main areas of demand made by India vis-à-vis the super powers, which are related to nuclear issues. First, there was the demand for general disarmament and specially nuclear disarmament.⁽¹⁾ Second, there were demands for steps to be taken against vertical proliferation. Third, ambiguous demands for guarantees against China. In all these demands, the nuclear option was used either directly or indirectly, tacitly or formally. However, as far as the first demand was concerned, the option became useful mainly in the debates about a non-proliferation treaty, primarily in the Eighteen Nation Disarmament Committee.

The position against nuclear weapons in general was voiced on many occasions. One example out of many was the Anti-Nuclear Arms Convention which took place in June 1962 and in which many Indian leaders took part, and which called upon the super powers to take various steps in the field of nuclear disarmament. Mr. Nehru for instance suggested the creation of Atom-Free-Zones in different parts of the world, while maintaining that the ultimate objective must remain complete disarmament.⁽²⁾

(1) This demand incidentally did not affect India's own development of conventional forces. For a study of India's defence policy which discusses the development of her conventional forces see Lorne J. Kavie, India's Quest for Security, University of California Press, 1967.

(2) On the Convention see The Hindu, 11.6.1962; 15.6.1962; 16.6.1962; 17.6.1962; 18.6.1962; 19.6.1962 (in which Nehru's speech was published); 20.6.1962; Guardian, 19.6.1962.

This Indian position on general and complete nuclear disarmament, was both part of the "nonaligned" approach to international affairs⁽¹⁾ and of the Ghandian heritage.

One formulation of the basic declaratory Indian position on the relationship between international security and disarmament can be found in Trivedi's words in the Eighteen Nation Disarmament Committee: "...India, in particular, believes that international security lies not in armament but in restraints on armament and in disarmament. That belief is, in fact, the basic philosophy underlying all discussions on disarmament whether in our Committee or elsewhere."⁽²⁾

Precisely because such an approach insisted that nuclear weapons were evil by their very nature; that the major danger to world peace and security sprang from the existence of two nuclear-armed blocs confronting each other all round the globe; that the nonaligned world could create some "area of peace" in the world; and lastly that nuclear weapons everywhere and in any hands cannot enhance security but rather diminish it, there was no logical possibility of positioning the Indian nuclear option as a bargaining counter within this ideological context.

(1) On the nonaligned approach to these problems see inter alia; C.V. Crabb, The Elephants and the Grass, Praeger, 1965, Chapter IV.

(2) ENDC/PV 335, 28.9.1967.

Even before the first Chinese test, the demand for nuclear disarmament, although pointed primarily at the super-powers had however a certain edge to it which involved China. If indeed nuclear disarmament took place all over the world and China adhered to it, then India's security could be strengthened as far as China's nuclear capabilities were concerned. Thus a demand directed primarily at the super-powers had at the same time a certain security advantage for India.

Seeking a general and complete disarmament, because of "nonaligned" ideological reasons, remained one of the demands of India after the Chinese first test as well, but other issues concerning Indian-Chinese nuclear relations became equally important.

The Indian nuclear option used as a bargaining counter in order to secure nuclear disarmament of the existing nuclear powers, became useful once negotiations on a treaty against nuclear proliferation got under way in the Eighteen-Nation Disarmament Committee. Here India was able to use the option as a bargaining counter precisely because the negotiations were about this option itself (along with the options of other near-nuclear-weapon states and the possible future nuclear options of all the other non-nuclear-weapon states). The sharp edge of this demand could be seen in Trivedi's ⁽¹⁾ words: "...Here we must make a clear and unambiguous distinction between the national

(1) ENDC/PV 223, 12.8.1965.

decisions of countries on the one hand and the obligations to be assumed by them as signatories to an international instrument on the other. As the Committee is aware, India is the only country besides the four nuclear Powers which has a chemical separation plant in operation producing kilogramme quantities of plutonium. If any country wishes to embark on a nuclear weapons programme, it must have a chemical separation plant or a gaseous diffusion plant. India is the only one of the countries not in possession of nuclear weapons which has this facility. And yet our Prime Minister has repeatedly declared that India does not intend to enter the nuclear weapon race. India believes that nuclear energy must be used only for peaceful purposes. This is our national decision, a decision which we have taken on a thorough examination of relevant political, economic and strategic factors, and we are determined to stand firm on it.

"An international treaty is, however, a different proposition. What we are discussing in this Committee is not the national decisions of countries."

India and the other nonaligned powers therefore pursued in the Eighteen-Nation Disarmament Committee two parallel objectives as far as the nuclear powers were concerned. First, repeated insistence that apart from the negotiations on measures against proliferation, the Eighteen-Nation Disarmament Committee should go on discussing problems pertaining to general and complete disarmament⁽¹⁾ and nuclear

(1) There are numerous references to this objective. See for example Trivedi in ENDC/PV 240 pp. 6-7.

disarmament, or at least partial measures towards it.

This demand was qualified however, in the sense that India was ready to pursue negotiations on "collateral" measures short of general and complete disarmament. Thus Trivedi: "... to be sure the nonaligned nations are determined to continue to urge on all concerned the imperative need to achieve general and complete disarmament; but they do not say that general and complete disarmament must form part of a non-proliferation treaty, or that there can be no treaty on non-proliferation unless there is comprehensive or even nuclear disarmament." (1)

Second, demands that the Non-Proliferation Treaty itself would contain some measures against vertical proliferation. Thus one of the basic demands of India in the Eighteen-Nation Disarmament Committee was that "the treaty should embody an acceptable balance of mutual responsibilities and obligations of the nuclear and non-nuclear powers, and that it should be a step towards the achievement of general and complete disarmament and, more particularly, of nuclear disarmament." (2)

This basic demand remained one of the bulwarks of the Indian position throughout the negotiations on nuclear proliferation in the Eighteen-Nation Disarmament Committee. Within the framework of this position the Indian delegation raised several issues:

(1) See ENDC/PV 240 p.13.

(2) Trivedi, ENDC/PV 298 p.9.

(1) a repeated call for a comprehensive Test-Ban Treaty and also for the adherence of all states to the existing Test-Ban Treaty.⁽¹⁾ This demand was clearly important for India also within the context of her conflict with a nuclear China.

(2) The call for a balance of mutual responsibilities and obligations of both the nuclear powers and the non-nuclear powers inside the proposed Non-Proliferation Treaty itself. Thus Chakravarty, to cite one example, said on 4.5.1965:⁽²⁾ "I have no doubt that the Disarmament Committee in Geneva will discuss this matter in detail, but I would like at this stage to outline for the consideration of the Commission what, in view of my delegation, could form the basis of an integrated solution of the problems of proliferation. The elements which should enter into an arrangement on non-proliferation could be the following:

- (i) an undertaking by the nuclear Powers not to transfer nuclear weapons or nuclear weapons technology to others;
- (ii) an undertaking not to use nuclear weapons against countries which do not possess them;
- (iii) an undertaking through the U.N. to safeguard the security of countries which may be threatened by Powers having a nuclear weapon capability or about to have a nuclear weapon capability;

(1) See Joint Memorandum ENDC/235 26.8.1968 by the eight nonaligned members of the Eighteen-Nation Disarmament Committee.

(2) 75th Meeting of the Disarmament Commission. See also Trivedi, ENDC/PV 335, 28.9.1967;

(iv) Tangible progress towards disarmament, including a comprehensive test ban treaty, a complete freeze on production of nuclear weapons and means of delivery as well as substantial reduction in the existing stocks and "

(3) Demands within the framework of atomic energy for peaceful uses, within the framework of the proposed draft non-proliferation treaty.⁽¹⁾

(4) A demand that the control system according to the proposed Non-Proliferation Treaty should be "... universal, objective, and non-discriminatory." According to this principle, the control system should be applied to the nuclear powers as much as to the non-nuclear powers.⁽²⁾

The outcome of the long and protracted negotiations in Geneva about measures against vertical proliferation was rather limited. Clauses 9, 10 & 11 of the preamble to the Non-Proliferation Treaty stipulate: (9) Declaring their intention to achieve at the earliest possible date the cessation of the nuclear arms race and to undertake effective measures in the direction of nuclear disarmament,

(10) Urging the co-operation of all States in the attainment of this objective,

(11) Recalling the determination expressed by the Parties to the 1963 Treaty Banning Nuclear Weapon Test in

(1) See Trivedi, ENDC/PV 335, 28.9.1967; see also Husain, ENDC/PV 370, 27.2.1968.

(2) See Trivedi, ENDC/PV 335, 28.9.1967.

the Atmosphere, in Outer Space and Under Water in its preamble to seek to achieve the discontinuance of all test explosions of nuclear weapons for all time and to continue negotiations to this end.'

And Article 6 states: 'Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a Treaty on general and complete disarmament under strict and effective international control'.

As has been noted in Chapter I, SALT was to a very limited extent the outcome of these stipulations. Obviously were it not for the realisation on the part of the super powers that their national interests might be affected by the continuation of the arms race, they would not have had started SALT.

It is difficult to speculate what might happen if SALT fails (but this is a very long term question). It rather appears that SALT will become a permanent feature of the super powers' relationship). Will it bring about the disintegration of the Non-Proliferation Treaty? In any case, within the context of the discussion of the Indian position the question is irrelevant as India decided not to adhere to the Non-Proliferation Treaty. But it appears that as far as most of the near-nuclear-weapon states are concerned, the super powers' arms race does not affect their direct security. Indeed, and this leads to the next subject, for powers like India and others on the periphery of China, the main concern is not how to halt the nuclear developments

of America and the Soviet Union, but rather how to keep the nuclear gap between each one of these powers on the one hand and China on the other, from narrowing. The answer to this dilemma lies in the Indian call for a complete disarmament to which China should also adhere. This was not a realistic programme. But, although from the national security angle India could not attain any significant advantage from a limited nuclear disarmament programme which would apply only to the super powers, she remained, as has been pointed out above, one of the main protagonists of measures against vertical proliferation.

Guarantees against China

The third area of bargaining with the super powers in connection with nuclear issues, was the problem of the Chinese bomb. The Chinese test of October 1964 created great anxieties in India. The government's policy of not 'going nuclear' came under heavy attack and the need was felt to formulate some coherent new approach to the subject. Within this context, the Indian government embarked on some initiatives which could have been interpreted as an attempt to secure super-power nuclear guarantees to India against a Chinese nuclear threat or the actual use of the bomb. There were reports to the effect that in his meeting with Mr. Wilson, The British Prime Minister, in January 1965, Mr. Shastri raised the possibility of some sort of joint nuclear guarantees by the super powers and Britain against a Chinese nuclear threat. Although these reports were denied by Shastri, he did point out in a press conference on

20.1.1965⁽¹⁾ that he had conferred with leaders of other states about the best way of how to act against a danger of a nuclear threat.

India was obviously caught here in a difficult dilemma. She was reluctant to forgo her nonaligned position which required that she would not accept military guarantees by the super powers, while at the same time she was still adhering to the 'no nuclear' policy formulated by Nehru. But such an approach would have meant that India would remain without any nuclear 'shield' against a possible Chinese nuclear threat. In very general terms, by declaring, as she did on several occasions during 1965 and later on that she would not 'go nuclear', India weakened her bargaining position vis-à-vis the nuclear powers, as far as nuclear guarantees were concerned. On the other hand, keen observers of the Indian scene could gradually come to the only conclusion: that if some form of guarantee for India were not found, India would eventually have to 'go nuclear'. But the question really remained what type of guarantees India was seeking?

India was probably interested in some form of joint guarantee by the two super powers, which would be channelled through the United Nations. Both America and Russia had their own reservations about extending unilateral guarantees to India, partly because they would lack the necessary amount

(1) See The Hindu, 21.1.1965.

of control over decisions taken in New Delhi. Because of ambiguities in the Indian position, and the hesitations on the part of the super powers, the only outcome was the Security Council guarantee. This guarantee however, is extended only to states adhering to the Non-Proliferation Treaty. Once India decided not to adhere to the Treaty, this guarantee does not cover her. Indeed, during the debate on this guarantee, India demanded that it should cover every state and not only Parties to the Treaty.

At the same time, the super powers have a great stake in deterring China from using nuclear weapons or nuclear threats against India. This interest stems both from their reluctance to see China gaining further influence in Asia, and secondly from their interest in non proliferation. If China used her nuclear weapons against India, then India and probably other near-nuclear-weapon states would decide to 'go nuclear'. Thus the Indian option plays here a tacit role, in securing a tacit guarantee by the super powers.

One paradoxical outcome of the Security Council guarantee, is that the credibility of super-power guarantees to non-nuclear powers which have not signed the Treaty, was somewhat affected. To the extent that this guarantee is at all credible, the fact that a non-nuclear power is not covered by it might create doubts as to the readiness of either of the super powers or both of them, to come to its aid. At the same time, in the case of India, the interests of the super powers in deterring Chinese nuclear threats, is such as to lend credibility to their tacit commitment. There have been signs that the Indian Government attaches some credibility to this tacit guarantee. However, India decided recently to develop a comprehensive and sophisticated option which will enable her to decide a full scale weapon programme.

The Uses of the Israeli Nuclear Option⁽¹⁾

The Israeli nuclear option was used, or could have been used⁽²⁾ as an instrument either of compellence or of deterrence, in order to secure diplomatic or strategic objectives. This range of possibilities applied to its uses both vis-à-vis the super powers, and against the Arab states. In both cases the uses were partly based on intentional or unwitting ambiguity.

Uses of the Option Within the Context of Relations with the Super Powers

A distinction should be drawn here between those uses which were directed primarily at both super powers together, and those uses which were directed at each one of them separately. This distinction was not always very clear, and in any case should be considered as a distinction between models of behaviour which only approximate to reality. Moreover, these models include elements of ambiguity which allow for a flexibility in the sense that the same use of the option would sometimes be directed at only one super power and at other times at both of them, or again that the same use of the option would create ambiguities as to the real intentions of Israel and hence to the question of the direction or objective of the use.

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- (1) For a comprehensive discussion of this subject see Appendix I 'Israel and the Atom: the Uses and Misuses of Ambiguity'.
 - (2) The following discussion concerns mainly the uses of the option until 1967. However, the models suggested are - with some changes due to the continued crisis in the Middle East - applicable at present (end of 1970) as well.

Arms control measures

The recurrent refusal of Israel to adopt a policy of separate negotiations about non proliferation of nuclear arms in the Middle East⁽¹⁾ could be construed as creating an advantageous bargaining position within a context of negotiations on supplies of conventional arms to the Middle East, primarily to the Arab countries. For a long period Israel insisted on the need to impose restrictions on the sale of conventional arms to the Middle East. That was due to the fact that the Soviet Union was supplying the Arab countries, and primarily Egypt with massive amounts of weapons under very easy credit terms and that this conventional arms race was assumed by some Israeli decision-makers to be detrimental to Israel. Presumably, if indeed general negotiations on arms control measures in the Middle East were to start, then the fact that Israel was much superior to Egypt in its nuclear development, would allow Israel to secure not only limitations on all conventional arms supplies, but also do so in a way that would favour Israel more than it would favour the Arab states.

Although this use of the nuclear option was aimed primarily at both super powers, it had at the same time some separate implications for each one of them. American demands for control of the nuclear activity in Israel or the demand that Israel should halt the development of its nuclear option could

(1) See Chapter 3. Cf. also a certain change in this posture under the Eshkol Government.

be countered by demands on America to seek a general and comprehensive arms control agreement which would cover conventional arms as well. At the same time, within the context of possible American negotiations with the Soviet Union precisely about such an agreement the Israeli nuclear option could be used by the American side as a bargaining counter. Thus the same option could be used by Israel against the United States in the first stage, and then again by the Americans as a lever against the Soviet Union in their own negotiations. This does not mean that the United States was interested in this option in the first place, and certainly it caused it much embarrassment, but once it was created it could have been used as a bargaining counter in negotiations with the Soviet Union.

A more tacit implication within this context concerns the use of the option against the Soviet Union. The implication here was that if the Soviet Union proceeded in its supplies of conventional arms to some Arab countries, Israel would have either to 'go nuclear', or to shorten the lead time needed for the invocation of the option. Such a tacit threat was naturally a double edged weapon, as it could be encountered by a Soviet counter threat to extend guarantees to these countries against an Israeli nuclear threat.

A search for military guarantees or alliances

The information on this point is vague and to an extent contradictory. Some search for military guarantees from the Western powers was conducted by Israel before 1967. It could be assumed that the nuclear option might have served

as one of the instruments of pressure by Israel in order to secure such a guarantee. At a certain period before the 1967 war, a joint American-Soviet guarantee for Israel would have been most welcome by Israel. Such a commitment was not forthcoming.⁽¹⁾ Also there was little readiness for a direct military guarantee by the United States to Israel. A political commitment existed all the time, but the question was whether it could be translated into a military one. The American reluctance to extend such a formal military guarantee was the result of several political factors which did not change basically after the 1967 war; but at the same time the growing Soviet military intervention in the crisis posed the question again at least of the readiness of the United States to extend a limited military guarantee to Israel against a possible Soviet attack. Could the option be used by Israel in this context in order to bring pressure to bear on the Americans to extend such a guarantee? There are two contradictory answers here: on the one hand the threat to 'go nuclear' in order to obtain American guarantees is not credible. This is so because Israel can not create a nuclear

(1) The possibility of a joint American-Soviet military guarantee to secure a political settlement of the current crisis in the Middle East has been mentioned, but the danger of nuclear proliferation was not the major issue motivating this proposal. At the same time it appears that decision makers in both super powers do realise that there is a danger of proliferation in case of a continued crisis. This realisation is part of the general concern about the future of the Middle East but need not necessarily be part of an intentional use of the option by Israel as an instrument of pressure. Indeed it is not yet clear what are the opinions of Israeli decision makers about this idea of joint American-Soviet military presence in the Middle East.

force which would be sufficient to deter possible conventional Russian intervention. Thus the threat to 'go nuclear' in order to deter the Russians would be irrational. On the other hand, Israel might maintain that without an American guarantee which would serve as a deterrent against Russian intervention, her very security was threatened. She would therefore threaten, as a desperate measure, to 'go nuclear', hoping that because of the American concern about proliferation, the latter would concede and extend the guarantee. This type of threat is more credible.

Securing the Supply of Conventional Weapons

This was perhaps the most feasible arena for the use of the Israeli option. Both super powers find it more and more convenient to supply arms rather than to give guarantees or commitments which, once extended, might involve them directly on behalf of their clients or close friends in the Middle East. This trend became much more obvious after the 1967 war. The readiness to supply such conventional arms after the war of 1967 was motivated presumably by disparate consideration which barely included the nuclear issue. At the same time the nuclear issue could be used in this context in the future. The nuclear option was probably used in this way before the war. Indeed one writer has suggested that in 1964 and again in 1966 Eshkol brought the option into play suggesting to the Americans that the activities in Dimona would not be extended beyond the level attained at that time, as a quid pro quo for the supplies of American conventional weapons which would allow

Israel to keep the balance with Egypt.⁽¹⁾ Clearly this particular use of the option was directed exclusively at the United States.

A search for political advantages

Under this general heading could come the uses of the option to secure various political advantages from both super powers. One general tacit use is the continuous signal to both super powers, that Israel is an important and powerful regional power; that Israel has another instrument in her general inventory of instruments of pressure and persuasion; that the option might be used whenever Israel found it necessary, and hence that she has an important potential nuisance-value for the two super powers. Again, this particular use is more obvious in the context of Israeli-American relations, as the U.S. is the super power which has the 'responsibility' to insure that Israel does not 'go nuclear'. The United States assumed that 'responsibility' as part of the general understanding between the super powers that each of them makes sure that its allies/clients or friends will not 'go nuclear'. (The other super power might be involved in this process of persuasion as well, and it is certainly involved in it tacitly, but its bargaining power is seriously curtailed because a direct intervention in the process of negotiations might be interpreted as intervention in the sphere of influence of the other super power and thus invite reaction by the latter). The situation is of course full of ambiguities. There are

(1) See Hodes, op. cit., pp. 235-6.

cases of completely nonaligned countries - and India is one example - in which both super powers are engaged in the persuasion process; there are also different patterns of relationship between aligned countries and their super power patron.

The Israeli concern with security problems on the one hand, and her consideration of the nuclear issue as primarily lying within the realm of the military on the other hand would suggest that the use of the option to secure political objectives was either not pursued or at least was likely to be pursued only marginally. This disinclination to use the option to secure political advantages would probably be strengthened by the problem of "linkage" between different sets of issues within the context of bargaining between powers. Although the practice of using different types of issues as leverages in a bargaining process between states is accepted and applied, it always involves difficulties of how to assess the value of an 'article' in one of these types in terms of a different set of 'articles' belonging to a different type or category.

Uses Directed at the Arab States

Several uses could be considered within this context: First the threat that Israel might 'go nuclear' would be sufficient to deter the Arabs from attacking Israel; Second, the creation and existence of an Israeli nuclear option, would prove to the Arabs the scientific and technological superiority of Israel. Thus it would deter them from

contemplating the possibility that they could ever compete 112
with Israel in science and technology, and this would lead
them to the recognition that Israel is unbeatable. The
option would also serve as a symbol of Israel's will to
survive, and an element of frustration for the Arabs. This
last element could be described as 'deterrence by frustration'.
Third, the higher level of the option would deter the Arabs
from trying to produce nuclear weapons. They would realise
that if they tried to do so Israel would be the first in the
race. Fourth, by creating intentional ambiguity and
uncertainty about the actual level of nuclear development
in Israel, the Arabs might suspect that the 'bomb' itself
was already in the hands of Israel. This would further
deter the Arab states from attacking Israel.

It appears that these uses have not changed the basic
pattern of the Arab-Israeli conflict which existed before
1967.⁽¹⁾ Furthermore, it could be argued that the
ambiguity and uncertainty might have had also counterproductive
effects from the point of view of the Israeli interest. Still
the option can be a useful instrument in this context
(specially in order to deter the other side from 'going
nuclear'), provided a certain amount of clarity were
introduced as to the terms of its invocation, and the
objectives which are hoped to be gained by it. Some such
clarification was introduced during the Eshkol government
before the 1967 war.

(1) See on this point, Chapter V.

The Indian and Israeli Uses of the Option: A Comparison

In the brief study of these uses outlined above, it appears that India and Israel represent two different types of uses of the option. The differences are due to the nature of the international environment in each case, and of their respective perceptions of their respective roles in the international system at large. India pursuing a non-aligned role, used the option as an instrument of pressure directed at both super powers, whereas in the case of Israel the use was directed more at the United States. India was concerned with both an important role in the international system, and in security against China. Hence she tried to use the option in order to secure measures of nuclear disarmament of the two super powers, hoping at the same time that these measures would also impose restrictions on the nuclear programme of China. At the same time she continued her search for some kind of guarantee against Chinese nuclear threats. Gradually the use of her option for the second objective became more important. India's search for some kind of guarantee was hampered from the beginning both by her hesitations about outside guarantees and by the growing realisation on the part of the super powers that nuclear commitments carry with them great difficulties and dilemmas. These are only aggravated by a multipolar structure of the world and the possibilities of escalation over which the super powers have only limited control. At the same time, because of the anti-proliferation policy of the super powers and their interest in not allowing China to extend her power in Asia, a tacit guarantee by the super powers against a

Chinese nuclear attack or threat against India, does exist, and is partly the result of the Indian option.

The initial Indian decision not to produce nuclear weapons, has not reduced the suspicions of outside powers about India's intentions, and thus the option could still have been used in order to secure advantages. The ambiguity surrounding the Indian programme and intentions was created by a mixture of the intensive activities in the nuclear field there, coupled with the Indian insistence (with more and more qualifications) that she was not planning to 'go nuclear', and with the realisation that, facing a nuclear China, India might find the pressure to 'go nuclear' irresistible. Thus part of the ambiguity and also the usefulness of the option as an instrument of pressure, were created by the perceptions of the other powers rather than by the Indians themselves.

Israel on the other hand is not facing a nuclear enemy and is part of a local conflict. Her interests are different and hence her uses of the option were different from those of India.

NUCLEAR DEVELOPMENTS IN ISRAEL AND ISRAEL'S OFFICIAL
POSITION ON PROBLEMS OF ARMS CONTROL AND DISARMAMENT (1)

During the period 1952-54 an increasing feeling of isolation, and hence anxiety, grew among Israeli decision makers. One factor in this was probably the assumption that the new revolutionary regime in Egypt would succeed in eventually transforming all the Arab societies, bring about a fast process of modernization, and thus considerably strengthen their military capabilities, without first changing their basic hostility towards Israel. Another factor was the fear of a change in U.S. policy from sympathetic neutrality towards Israel to active alliance with the new Arab regimes. The various plans for a Middle Eastern Defence Organization, centered either around Iraq or Egypt, served to exacerbate these fears and apprehensions. These developments were aggravated by infiltrations into Israel and the grave problem of day to day security. (2)

(1) Unless otherwise specified in the text, this chapter includes a discussion of developments and postures only up to 1967.

(2) The literature on the Suez War of 1956 abounds. However, on the Sinai War and the Israel's motivations for going to war, and also on the period of "retaliation policy", see mainly Ernest Stock Israel on the Road to Sinai 1949-1956, Cornell University Press; see also: Hugh Thomas The Suez Affair; Burns, Lt. Gen. E.L.M. Between Arab and Israeli, London: Geo. G. Harrap & Co. 1962; Childers Erskine, The Road To Suez, London, McGibbon & Kee 1962; v Michael Bar-Zohar, Gesher Al Hayam-Hatichon (Hebrew), Am-Hasefer, 1965; Dayan, Moshe, Diary of the Sinai Campaign, London, Weidenfeld & Nicholson, 1966. Gabbay, Rony E. A Political Study of the Arab-Jewish Conflict, Geneva, Librairie E. Droz, 1959; Marshal, S.L.A. Sinai Victory, New York, Morrow, 1958. Allon, Yigal, Kasach Shel Chol (Hebrew).

There have been various schools of thought in Israel which suggested different approaches both to these problems, and to the question of the best strategy for countering the political and security problems. The strategy adopted eventually culminated in the Sinai Campaign of October-November 1956. In this war Israel secured three objectives: (1) the end of organized infiltration sponsored by Egypt; (2) the opening of the Straits of Tiran; (3) the reinforcement of the credibility of the capabilities of the Israel Defence Army. The second objective was guaranteed by an international arrangement, with the U.S. as the main guarantor.

After the end of the Sinai war of 1956 there was also a feeling that the direct military threat to Israel by the Egyptian army had been eliminated for some time. It seems, however, that the basic assumption in Israel about the unabated hostility to Israel in the Arab world had not changed. Moreover, there was the fear that eventually Arab society might change and become modernised and also, perhaps, some kind of Arab unity might emerge. These changes, plus the tremendous effort devoted, mainly by Egypt, but also by other Arab countries, to military purposes, contributed in Israel to permanent concern about the stability of the balance of power. The basic assumption that if Nasser felt himself strong enough he would certainly attack Israel and that he was building up his army in order to achieve precisely such a superiority, persisted.

The problem therefore was how to retain the balance of power so that there would be no new war. In other words, the problem was how to deter the U.A.R. from trying to start another war. Thus, gradually a new doctrine of strategic deterrence started to emerge. It is conceivable that this doctrine was either the intellectual basis for a decision to start a scientific and technological effort which on its part would create an option for nuclear weapons, or that this new doctrine started to develop only after the initial scientific and technological decisions were taken and work had actually started. It is also possible that the strong links between Israel and France during this period, and especially the very close relations between the defence establishments of the two countries, contributed to the decision. After all, this was the year in which France entered a crucial stage in her own nuclear activity.⁽¹⁾

It seems that the new doctrine of deterrence as it gradually developed contained two layers. The first related to the conventional army. Here, a posture of deterrence was derived partly from the victory in Sinai, partly from letting the other side realise that Israel was continuing to build-up a strong and efficient army. The notion that the image of Israeli capability in the eyes of the other side was of vital importance became increasingly central to Israel's decision makers. This insistence on

(1) See on this point p. 131.

the problem of credibility as part of a deterrence posture is of course valid and important. The problem inherent in such a posture is that it may lead (1) to ever bigger arms races or (2) to a process of escalation, if the enhancement of the credibility demands demonstrations of force from time to time. The dilemma is a tortuous one. If credibility is not underlined by retaliatory attacks in face of provocations such as Fedaveen-type attacks, there may be a loss of credibility and a process of escalation may start. On the other hand, retaliatory attacks can themselves start a process of escalation.

The second stage of the new doctrine was that aiming at the eventual creation of a nuclear option.

Within the context of the decision making process in Israel itself, it appears that the group which was pressing for some time for nuclear development was the scientific establishment attached to the Defence Ministry. This group was headed by Professor Ernest Bergman, the chief scientific adviser to the Defence Ministry. Professor Bergman, a well known scientist and a man with considerable knowledge of defence problems, had always been interested in these problems and contributed considerably to the defence-oriented scientific effort in Israel. Furthermore, he enjoyed direct access to the Prime Minister, Mr. Ben Gurion. It appears that it was Professor Bergman who first raised the question of nuclear development in Israel and he persisted with this idea for some time.

His proposals date back to some time in the mid-fifties, but it was only later that the initial decisions were taken. From the beginning, however, while it was Professor Bergman who controlled the scientific side of the project, its complex political and administrative aspects became the concern of Mr. Shimon Peres, the director general of the Defence Ministry. It was Mr. Peres who succeeded in organising this comparatively huge effort (huge for a country the size of Israel), and eventually his name was increasingly identified with the whole project. This, combined with Mr. Peres' political ambitions and his growing influence on the Prime Minister, Mr. Ben Gurion, gave rise to serious suspicions and apprehensions among his political rivals. Eventually one of the contexts within which the nuclear project was discussed in the public and semi-public debate was concerned with the kind of special influence and control that Mr. Peres personally entertained with regard to it. What is significant in the context of this chapter is that there is no doubt that part of Mr. Peres' personal 'France-oriented' policy was affected by his ever-growing involvement with the nuclear project. What is also significant is that this was not just Mr. Peres' attitude. A large part of the Israeli establishment (especially the group around the Prime Minister Mr. David Ben Gurion) was influenced in their European-orientated foreign and defence policy by the nuclear effort in Israel. This influence was a complicated process of interaction by which arms and technological needs, combined with the growing independence from a super power (in this case the U.S.A.), contributed at the same time

to the adoption (at least for a time) of a certain strategy. This strategy on its part coupled with the needs mentioned above, had their impact on the foreign policy of Israel.

Thus, as will be shown later, if Israel wished to build a nuclear option as the mainstay of her deterrence posture, she needed certain technical aid from France, but at the same time she could not avoid certain political differences with the U.S.A. If the policy was pursued, then technological co-operation with France on the one hand and the international opposition to nuclear proliferation on the other would have to bring about changes in foreign policy. Israel would move closer to French attitudes about the relationship between the super-powers on the one hand and medium and smaller powers on the other hand, especially as far as the nuclear debate was concerned, and at the same time relations with America would be further aggravated. This development was only partly inevitable. It was accelerated by some misperceptions that some Israeli decision makers had about the connection between positions on the issue of nuclear proliferation and the general policy of America, France and Israel.

Thus, once nuclear development had started in Israel, it became increasingly one of the factors in the formulation of a certain foreign policy, namely the European (or French) orientation which was mixed with an anti-super-power approach. This development also became an important issue in domestic politics and debate.

At present there is no available evidence as to the initial intentions of the Israeli decision makers when the Dimona project was planned and launched. If, indeed, the objective of some Israeli decision makers was to create eventually the actual weapons, then the rationale for it could have been as follows: The possible changes in the Arab world which have been mentioned before might create a situation in which an Arab victory with conventional weapons would not be an impossibility. Furthermore, the question is not just whether an Arab attack would prove to be a success, but of the nature of the Arabs' perceptions of the changes that might take place in their societies. Unity in the Arab world, or modernisation in the Arab world, might lead the Arabs to the assumption that they could succeed in their attack, and this even if the assumption proved to be false once put to the test.

Thus the only alternative to annihilation or to war in general, would be the creation of a decisive deterrent force which would convince the other side that they could never accomplish their aims.

One could speculate on further rationales. First, if nuclear deterrence failed then the new weapon could frustrate the conventional attack of the opponent. This could be achieved by threatening to use the weapon, once the possibility of a conventional defeat for the Israeli side arose.

Second, acquiring a superior weapon system, also meant the possibility of using it for compellent purposes,

namely to force the other side to accept Israeli political demands. This would presumably include a demand for the acceptance of the territorial status-quo and the signing of a peace treaty with Israel.⁽¹⁾ 122

All this would assume that the other side did not have similar weapons. The Israeli side would thus be left with a superior weapon-system which could be used for either deterrence, defence or compellence.

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- (1) For a possible reference to such an alternative see interview with Mr. Shimon Peres in Davar, 28.9.1962. Following are the relevant question and answer:
'question: When you have recently mentioned the need for a new approach, you have stressed the moves from the stage of defence to the stage of deterrence and from this to compellence. What is the new stage?
'answer: I would have explained it in the following way: when the types of arms in the hands of the two sides were limited, obviously the doctrine of defence had its place. The two sides had a long time to defend themselves, stop and in the last analysis conduct a defensive war. When the new jet planes and tanks arrived the main danger they represented was of surprise attack and naturally the basic defence was to deter the enemy from attacking. But when the non conventional weapons arrived, and in this stage they are mainly the missiles, by the very existence of the weapon - even before it is used - there might be created a compellence to the existing situation. Obviously when we say 'compellence' we have to remember the difference between the Arabs and ourselves as far as the objective of compellence is concerned. The Arabs want to compel us to surrender and we want to compel them to make peace. The difference between types of arms changes to a certain extent the various conceptual approaches'. (Mr. Peres refers here to the effects of missiles but says that his analysis of the phase of 'compellence' covers non conventional weapons in general. Whether he refers here to nuclear weapons or not is everybody's guess. What is important in this context is simply to speculate on how possibly the alternative of compellence as a use of nuclear weapons in the Arab-Israeli context could be envisaged). See also Avraham Schweitzer, 'Ha'aretz', 14.8.1962.

Subsequently, a new rationale was suggested by some political commentators on the development of an independent nuclear deterrent in Israel. The argument this time was that if both sides acquired nuclear weapons, then a situation resembling the 'balance of terror' between the two super powers, would emerge. It was argued that it was possible to transform the present (pre 1967) unstable situation between Israel and the Arab countries into a new situation, whereby the Arab world would be convinced that there was no hope of defeating Israel, and would accept the 'rules of the game' which governed the behaviour of the two super powers.⁽¹⁾

The decision to start the Dimona project could have most probably be aimed at creating an option. Eventually the option which in fact was created served or could have served several purposes.⁽²⁾ It is not clear however whether it was intended from the beginning to use the option as a bargaining counter for strategic and diplomatic bargaining.

The notion of a nuclear option is by itself very intriguing. The term itself was coined and used for the first time by Beaton and Maddox in their famous book: 'The Spread of Nuclear Weapons'. Was it after they published

(1) On this rationale see below in the chapter on the public debate in Israel.

(2) See Appendix I.

this book that decision makers in states developing nuclear capabilities realised that in fact what they were doing was building an option, or was it rather that after the publication of the book some decision makers decided that the idea of an option was worthwhile and therefore concentrated on building the option while postponing the final decision? Or was it still that the publication of the book coincided with growing pressures against 'going nuclear' from the super powers on the potential nuclear powers? Could it be that this pressure was combined with the realisation by decision makers of the various potential nuclear powers of the dangers and complexities of the problem, a realisation which forced them eventually to build options rather than face the agonizing consequences following the momentous decision to 'go nuclear'?(1)

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- (1) In the British case at least the initial decision was to 'go nuclear'. From the very first nuclear research was aimed at producing nuclear weapons. In Britain, this was simply the continuation of research and development conducted in cooperation with the U.S.A. Even during the War itself, there was an indication that Britain was interested in building its own independent nuclear weapons regardless of the exigencies of the Second World War. Thus at a meeting in which Lord Cherwell, Harry Hopkins and Bush took part on May 25, 1943, Lord Cherwell admitted that the U.K. objected to the American principle of restricting the information flow according to the 'use in war' principle, and that 'his government wanted the information at once so it could manufacture the weapon promptly after the war'. (See R.N. Rosecrance 'British Incentives to Become a Nuclear Power' in R.N. Rosecrance (ed.) The Dispersion of Nuclear Weapons, Columbia University Press, 1964). Rosecrance quotes from R.C. Hewlett and O.E. Anderson Jr. 'The New World, 1939-1946' (Vol. 1 of A History of the United States Atomic Energy Commission, University Park, Pa., 1962, p.266). The decision to build independent nuclear weapons was taken in 1945 when the Prime Minister announced to Parliament that 'the government have decided to set up a research and experimental

contd...

The French example is interesting in discussing the Israeli project because of the initial French involvement in the Dimona Project which created the Israeli nuclear option and because of the close links existing at the time between the two defence establishments. It is also significant that the two states collaborated in the Sinai campaign and possibly drew some common conclusions from it. That they drew identical conclusions from it is the result of their mistaken assumption about their respective position within the international system. After the 1956 war, France

Footnote continued from preceding page.

establishment covering all aspects of the use of atomic energy'. (Quoted in Rosecrance op. cit.) Thus, for various reasons, Britain from the beginning applied a nuclear weapons' programme without even considering the possibility of building only an option.

As far as France is concerned, the situation was less clear-cut. It seems that France decided to prepare for 'going nuclear' some time at the beginning of the fifties, with the decision both to make nuclear weapons and nuclear submarines taken by Mendes-France in 1954. This decision was ratified by the Mollet government in 1956 (see Ciro Zoppo, 'France as a Nuclear Power' in R.N. Rosecrance (ed.) 'The Dispersion of Nuclear Weapons, op. cit.') i.e. long before De Gaulle came to power. However, work on nuclear projects which could lead eventually to a weapons programme had started in 1945 when the Commissariat a l'Energie Atomique was established. But only in 1951 did those who were concerned with military strategy start considering the question of a weapons programme and conclude that nuclear armaments were perfectly conceivable for a country like France. (See Zoppo, op.cit.). This shows that a possible option was envisaged in 1945 but that no decision was taken at the time to develop a nuclear weapons' programme. The first discussion of such a programme started after about five or six years.

There is still another possible explanation i.e. that from the very beginning, there are usually different approaches among the decision makers concerned with these projects. Some of them are interested in a full and comprehensive nuclear programme, while others are reluctant to go in this direction. A nuclear option is sometimes the result of disagreement among decision makers rather than an elaborate decision, taken by all concerned.

realised the limitations of an independent policy in what she assumed was a bipolar world. She faced the dilemma of a member of a military alliance organised to deter the Soviet threat, where the leader of the alliance, the U.S.A., demanded political discipline. She felt that an independent nuclear deterrent was needed, both to pursue an independent policy, and to deter the Soviet threat if the U.S.A. found it impossible to intervene on behalf of Europe once deterrence failed. (At least these were some of the explanations, or rather justifications, advanced by France. It seems that they probably played a part in French nuclear policy.)⁽¹⁾

Israel on the other hand was outside any military alliance and was thus ostensibly more vulnerable to aggression. However it was not confronting a major power and also enjoyed the ability to develop an independent policy without threatening the framework of an alliance. Israel was confronted with a conventional threat outside the whole alliance system. While these strategic, political, and psychological situations required therefore that France and Israel would pursue separate approaches, nonetheless it seems that the French example had some sort of influence or impact upon Israeli decision makers.

(1) See Zoppo op. cit.; Lawrence Scheinman, 'Atomic Energy Policy in France Under the Fourth Republic', Princeton University Press, 1965; Wolf Mendl, Deterrence and Persuasion, London 1970, p 15.

The Building of the Israeli Nuclear Option

The new doctrine of deterrence built on a nuclear option and believed to be a satisfactory answer to any change in the balance of power emerged gradually. This new development was kept secret and thus its revelation to the world was all the more dramatic.

On the 16th of December 1960 the London 'Daily Express' claimed that American and British intelligence experts believed that Israel was developing an atomic bomb. According to the paper, a sudden meeting of American statesmen and intelligence leaders had taken place to discuss this surprising information. The meeting had been summoned by Allen Dulles, and the President-Elect J.F. Kennedy was among the participants.

Three days later, American and British newspapers proceeded to discuss the matter at length. The picture which emerged from these reports was as follows:

Israel, with French aid, was secretly building a large atomic reactor near Beer-Sheva in the Negev. American intelligence experts had become so worried that they reported the whole matter to the Joint Atomic Energy Commission of the Senate and the Congress. This briefing took place on the 9th of December with C.I.A. and State Department officials giving the details. Intelligence experts believed that the reactor was of the same type as the first French plutonium reactor.⁽¹⁾ In response to

(1) See New-York Times 19.12.1960.

questions put by the American Administration, Israeli officials were reported to have said that what was being built was a textile plant.⁽¹⁾

Over the years more information about the atomic capabilities of Israel has been published in open sources from which it appears that the first plans for nuclear development in Dimona were drawn up some time in 1955.⁽²⁾ However these seemed to be on a very modest scale. In 1957 a secret agreement relating to Dimona was signed with France, the details of which are not yet known.⁽³⁾ The reactor eventually built was of the natural uranium type, with a capacity of 24 Mgw and capable of producing around 6 kgms of plutonium a year.⁽⁴⁾

The usual stages for acquiring a nuclear capability in the plutonium range are: a reactor; a chemical separation plant; mastery of the technology of a bomb; a test; an appropriate delivery system. The open information available points to the existence of a reactor and a possible conventional delivery system in aircraft. There is no evidence of a chemical separation plant. Such a plant is a major technological undertaking and it seems inconceivable that it could be built in secret, although it is possible to reprocess the plutonium in laboratory conditions. However,

(1) See Daily Telegraph 20.12.1960.

(2) See Jewish ~~Chronicle~~ Observer

(3) See L. Beaton and J. Maddox, 'The Spread of Nuclear Weapons', London 1962.

(4) Beaton and Maddox op. cit., p.173; William R. Van Cleave, 'The Impact of Nuclear Technology on the Middle East', International Research and Technology Nuclear Journal, February 1969, p.31.

this is a very slow and expensive method. (1)

Apart from a possible conventional delivery system, there have been persistent news reports of the development of a missile system in France for Israeli use. If these news reports are correct, then Israel could acquire in a short while a sophisticated delivery system capable of carrying nuclearwarheads. The system is reported to be made of a version of the French 'Diamant' missile. Other sources, however, consider that the 'Topaz' missile is being used as the basis for the Israeli-French development effort. There have been reports of several test shots and the supply date was fixed at 1970. (2) The imposition of the total embargo by France may presumably have affected this date.

The French Interest

What were the French motives in signing the secret agreement with Israel of 1957? Soon after the first reports of collaboration between France and Israel appeared in the press some explanations as to the French position were advanced:

(1) that French nuclear assistance would anger, embarrass, and confuse Nasser. This would help France in its efforts to crush the Algerian rebellion, which in the French view was backed to a very large extent by President Nasser. (3)

(1) Ibid.

(2) See New York Times 7.1.1966; Daily Telegraph 8.1.1966; Janes 'All the World Airplanes 1969-1970', p. ; Van Cleave, op.cit., p.28.

(3) Daily Express, 19.12.1960.

(2) General de Gaulle proved by this step the 'nuisance value' of France. This would enhance his position vis-à-vis the U.S. In other words, if America did not respond to French demands the latter might behave irresponsibly.⁽¹⁾

This last explanation seems however somewhat far-fetched, as at the time of the signing of the secret agreement between France and Israel de Gaulle was not yet in power, and the previous régime was not nearly so intent on acquiring nuisance-value capability vis-à-vis the U.S.A.

(3) The selling of nuclear knowhow would balance some of the French expenses in its nuclear development.⁽²⁾

(4) France was interested in acquiring more plutonium. Thus by aiding the Israelis in their nuclear effort she would eventually get the plutonium produced in Dimona.⁽³⁾

(5) French prestige. France would become an exporter of nuclear knowhow.⁽⁴⁾

Because the processes which brought about the French decision are still shrouded in secrecy, it is difficult to establish which of these explanations is the most valid or sufficient.

(1) Daily Express, 19.12.1960.

(2) ibid.

(3) The New York Times, 19.12.1960.

(4) ibid.

It is interesting to note the general background in nuclear matters at the time. 1957 was a year of great activity in the nuclear field the world over. It was the year in which the Sino-Soviet agreement to 'share new technology' was signed, in which the Soviet Union undertook to recognize whatever came under the heading of 'new technology'; the year in which Bourges-Maunoury elaborated the policy of guaranteeing that France would remain one of the great powers by manufacturing nuclear weapons⁽¹⁾, and the year in which great developments in 'atoms for peace' programmes took place in many parts of the world.

The French position on proliferation was described as anti-disseminational i.e. opposition to the nuclear powers giving nuclear weapons to other countries. At the same time, it argued that it could not oppose independently produced nuclear weapons by new powers.⁽²⁾ It seems that by its contacts with Israel in the atomic field France struck a middle way i.e. disseminating nuclear technology, without actually exporting nuclear weapons.⁽³⁾

The Official Israeli Policy on the Question of Nuclear Weapons in the Middle East (up to 1967)

I Israel assumptions about arms-control and disarmament

The creation of the State of Israel, the 1948 war and the armistice-regime which governed the relations between

(1) W. Mendl, op.cit. pp. 104-105

(2) W. Mendl - 'French attitudes on disarmament' Disarmament, June 1967, republished in Survival December 1967.

(3) Israeli-French nuclear co-operation probably weakened gradually even before the 1967 war. This was due probably to the gradual change in French policy on the Middle East and on nuclear proliferation.

Israel and the Arab states for eighteen years, have not abated Israeli consciousness of the military dangers posed by various Arab states. Some sort of an arms race, or at least the motives for starting such an arms race, have existed throughout this period in the Arab-Israeli area. This kind of tension and awareness formulated the basic attitudes of the political and military elite to the problems of arms control and disarmament. In fact some sort of an arms competition and later an arms race, persisted all through this period. Thus Britain resumed her arms exports to the Arab countries immediately after the end of the 1948 war, and Israel turned in 1950 to the U.S.A. and asked for deliveries of armaments of various kinds, including jet aircraft. Later on, the Tripartite Declaration of 1950 purported to control the arms trade in the Middle East, but its effectiveness was limited. The various plans for the establishment of a Middle East Defence Organization, centered on Egypt or Iraq, did not help a policy of arms control in the area. Furthermore, the Soviet Arms Deals with Egypt (ostensibly described as the Czechoslovak Arms Deal) on the one hand, and the French-Israeli Arms Deals of 1955 and 1956 on the other, further damaged any policy of arms control. The period 1957 to 1967 was characterised by an ever growing arms race in the Arab-Israeli area, an arms race which certainly at one and the same time further affected Israeli thinking on arms control and was, at least as far as Israel was concerned, itself partly the product of the same Israeli thinking.

It appears that Israeli thinking on these problems was based on the following considerations:

(a) The existence of a 'ferocious' conflict with the Arab states, a conflict which had already escalated twice into war, and had the potential of escalating again into war.

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(b) The belief that the ultimate arbiter in this conflict was the force of the sword.

(c) The belief that the only guarantor of the security of the country was the Israeli army.

(d) The low credibility that was attached to possible military guarantees from the Big Powers. There were two qualifications to this assumption: first, from time to time Israel sought to become a member of a military alliance with Western countries. This suggests that if this had been achieved, Israeli attitudes towards such military guarantees would have been different. Second, the cordial relations between America and Israel during the Eshkol government may have created the impression that there was some tacit American guarantee to Israel. Thus Mr. Eshkol, speaking to an American correspondent, said that he was told by American officials while asking for American weapons '... do not spend your money. After all we are here and the Sixth Fleet is in the Mediterranean'.⁽¹⁾ It is not clear whether Mr. Eshkol himself used this opportunity in order to show his trust in some sort of a tacit American guarantee, or whether it was the other way round. In any case, this declaration brought about an intensive debate in Israel itself, and the general, almost unanimous, feeling was that Israel could count only on its own power and not on outside aid.

(e) The belief that as Israel was superior to its enemies in scientific capabilities and technology, these

(1) Quoted in Shmuel Segev, Milchama ve-Shalom Bamizrach Hatichon (Hebrew), Tel-Aviv, 1968, p. 68.

potential advantages should be utilised in the field of armaments.

The notion of superior scientific capability as part of the general security effort had two aspects. The first entailed that only if Israel became a developed industrial and technological society could she sustain the conflict; by being a developed country the quality of her people as citizens and as soldiers would be raised; and so on. The second aspect was more limited, holding that by developing scientifically, Israel would be able to use her capabilities for arms production and for an efficient use of the army. Both aspects were dealt with extensively by Israeli leaders. To cite an example for the first aspect: on 2.11.1955 Mr. Ben-Gurion who had become Prime Minister again, presented his new Government to the Knesset and concentrated on the security problem. He said inter alia: 'Security means encouraging scientific research and scientific ability in all the physical, chemical, biological and technological professions and this on a high level with top expertise. We shall never have quantitative superiority in human resources, equipment and material resources. But we can have spiritual superiority, and we have to develop it to the utmost of our moral and intellectual capability.'⁽¹⁾ Obviously for Mr. Ben-Gurion this emphasis on scientific capability had in this particular example even wider implications than the first aspect suggested above.

(1) See David Ben Gurion 'Medinat Israel Namitchadesh' (Hebrew), Vol. 1, pp. 469-470.

As far as the second aspect is concerned, i.e. the contribution of modern technology to the development of arms, a good example was the following: '...The development of new arms, the production, maintenance and repair of existing ones, all these demand a highly developed modern and bold scientific, industrial and technological level'.

'...There must be national readiness to invest in scientific and technological development. This investment may not bring immediate results but it is vital for the future...'(1) '...For this we need three simultaneous efforts. One effort for the short run, that is the industrial one: to change the nature of industry in Israel, to make it more modern, automatic, rational. ...second, for the medium range, a scientific effort.... Third the educational effort. This is the long term.'(2) And Yigal Allon, while discussing the general problems of the security of Israel, wrote: 'The military needs encouraged and quickened the development of technological sciences and its accomplishments. The wish to have the upper hand in the battlefield while competing with the enemy, diverts large resources to scientific research aimed at scientific inventions. But pure scientific research, even that pursued without being contracted for by the defence establishment, contribute to the development of armaments. It is a 'national must' for Israel to strive to achieve a high scientific level in its technology....There are highly

(1) Shimon Peres, 'Hashlav Haba' (Hebrew), Am Hasefer, Tel Aviv, p. 238, 1965.

(2) Peres op. cit., pp. 266-267.

developed teaching and research institutions in Israel... On top of them there are scientific branches in various economic institutions and the Defence ministry invests a lot in encouraging military research'.⁽¹⁾

(f) The belief that in an arms race the Arabs would always be quantitatively superior. Thus Israel should try and balance this kind of superiority by other means.

(g) The belief that the search for a limited military superiority arrived at by a better quality of the soldiers or by the quality or kind of weapon systems acts as a deterrent. This was based on the assumption that there was no hope in the short, nor perhaps in the middle term for a political settlement to the conflict, and only a balance of power tipped in favour of Israel would secure the continuation of the status quo. In this last assumption and in some of the others, Israel's attitudes were and still are common to states involved in situations of severe international conflict. The notion, for example, of the 'balance of power' as a balance in which 'we' are stronger than the other side is very common.⁽²⁾

It would be a simplification to assume that these considerations and attitudes were always present with the same intensity or importance. There have been changes in

(1) Allon 'Masach Shel Chol', pp. 183-184.

(2) See Ernest Haas 'The Balance of Power: Prescription, Concept, or Propaganda', in James N. Rosenau (Ed.), International Politics and Foreign Policy, The Free Press, New York, third printing, July 1965.

some of these attitudes, the most marked occurring probably first in the mid-fifties and then again between the Ben-Gurion regime and the Eshkol regime (1963-67). Both during the latter years of the Ben-Gurion period and mainly during the Eshkol period the emphasis on deterrence grew. The concept itself was used or applied less before these periods.⁽¹⁾

Another latent assumption was the lack of trust in the feasibility of arms control measures. This stems probably from one or some of the following causes:

(a) The image Israel has of the attitudes and objectives of the Arabs. This image, which seems at least partly to correspond to reality, entailed the belief that if the Arabs did gain military superiority they would try eventually to use it against Israel; it also entailed the belief that this was the overriding consideration of the Arab states, i.e. it stood at the top of their list of priorities. This last did not necessarily correspond to reality, but there was certainly enough evidence for it in various Arab declarations to enhance the image quite considerably. These two parts ... of the image destroyed one of the bases for any disarmament or arms control negotiations, i.e. the tacit assumption that the other side would be ready to accept some self-imposed limitations in the field of arms.

(b) The lack of communication between the two sides to the conflict. This situation was already institutionalised

(1) On some uses and misuses of the concept of deterrence in Israel see below in Appendix.1.

in the Arab-Israeli conflict. In passing, one may argue that objectively such a barrier need not necessarily hamper arms control measures based on tacit understandings, although these will be much more vulnerable than tacit understandings reached in conflicts where some kind of communication and dialogue goes on. However, the point here is not the feasibility of arms control measures but the Israeli perceptions and assumptions about these measures.

(c) Lack of symmetry between Israel and the U.A.R., in either strategic doctrine or the main objectives of foreign policy; and also between Israel and some of the other Arab states - those which were directly involved in the conflict. This lack of symmetry even when not defined and perceived in such a way, hampered chances for arms control measures. When this asymmetry was recognised as such by the parties to the conflict, it can be seen why there was less scope for arms control measures in the Arab Israeli area. (1)

However, perhaps without formulating it in so many words, Israel and the Arab states had some experience of arms control measures. In some cases they even accepted them with more or less enthusiasm. These were of three kinds: (a) arms control measures related to the supply of arms, imposed by the big powers. Thus during the war of 1948 and again between May 1950 and 1955 a certain system

(1) On the need for such symmetry in arms control, see Thomas Schelling 'Signals and Feedback in the Arms Dialogue', Bulletin of the Atomic Scientists, January 1965.

of arms control operated under the Tripartite Declaration of May 1950. It is doubtful, however, first, to what extent the parties to the conflict accepted these measures in practice; and second, if they did accept it, whether it was not the result of lack of demand on their part rather than adherence to a policy of arms control imposed from the outside. Thus in commenting on the whole situation in the field of armaments during the first half of the fifties, Mr. Peres, who was at the time Director General of the Defence Ministry, said: 'During the period after the War of Liberation we purchased most of our weapons from surplus stocks from the Second World War. The big powers applied a total embargo, but the Arabs enjoyed the armaments left in the Middle East after the war. We had to be enterprising and develop various tricks in order to bring the weapons we needed for the rebuilding of Zahal'.

'At the beginning of the fifties the embargo was gradually weakened. The Tripartite Declaration of 1951 (here Mr. Peres certainly meant 1950), about ostensibly balancing the arms supplies to the Middle East, opened before us the first opportunity to buy more modern weapons. This period was marked by self-restraint by the supplier countries. The Arabs got more modern weapons than were given to us, but even the arms given to the Arabs were given with restraint'.

'The situation changed completely at the end of September 1955, with the conclusion of the Czechoslovak-

Egyptian Arms Deal....⁽¹⁾

(b) Arms control measures related to the military strategic doctrine of Israel. The military situation dictated to Israel a strategy based predominantly on counter-force tactics. This on its own part brought about decisions to concentrate, for example, on aircraft systems devoted predominantly to counter-force tactics, and also dictated the objective of "disarming" enemy armies (first and foremost the Egyptian army) rather than bomb enemy populations. This was the strategy to be applied during the Six Day War itself.

The strategy of compellence⁽²⁾ which was evident in some of the retaliation raids taken during the fifties should be seen within a context of 'no war' time. Within the context of war, it could be construed rather as a limited strategy not necessarily aimed at compellence but rather at "disarming" the enemy. This strategy may have partly changed after the Six Day War when under the impact of a limited actual war along the new cease fire lines and guerilla attacks, Israeli forces were reported to have bombed centres of population. This may have served two purposes: (1) to deter future attacks; (2) to act as 'coercive violence' in order to convince the Arab regimes that they should eventually comply with some or all of the Israeli demands.⁽³⁾

(1) Speech made in May 1962, see Shimon Peres, Hashlav Haba (Hebrew) 'The Next Phase', Tel Aviv, 1965.

(2) For a definition and elaboration of the concept of compellence see Thomas Schelling, 'Arms and Influence', Yale University Press, 1966.

(3) On the aspect of 'compellence' in the Israeli 'deep penetration' bombing of Egypt in 1970, see Yair Evron, 'The Soviet Union in Egypt', The New Middle East, London, June 1970, reprinted in Survival, Institute for Strategic Studies, August 1970.

It seems however that in the particular psychological situation in which the Arab World finds itself at present, the second function will not be fulfilled. On the contrary, actions like these act as a cohesive force among sections of the populations in countries bordering Israel and breed violence and a desperate commitment to continue attacking Israel. The first purpose would be fulfilled were it not for the fact that Israel's neighbour powers are not in a position to control the Palestinian organizations responsible for a great part of the infiltration. It seems that even here a counter-force strategy is more fruitful.

(c) In the field of limited reprisals to provocations - here of course there were definite changes from the fifties to the sixties. Suffice it to mention here that during 1965 and up to the Samu reprisal of November 1966, Israel adopted a strategy of limited reprisal as against the Fatah infiltrations. Only this period, therefore, could be considered as one in which a conscious strategy of limited reactions which could also be construed as an arms control measure was adopted. The strategy adopted during the fifties, as well as the Samu action, contributed to a process of escalation and thus could be construed as anti-arms control measures.

In order to understand the whole issue of arms control measures in the Middle East, one must refer to the basic differences in policies and strategies during the fifties and the sixties in Israel. Here a distinction should be drawn between three levels:

(a) The main objectives of foreign policy. Throughout the existence of Israel up to June 1967, the main aims were: to secure the territorial status quo; to secure a balance of power in order to maintain the status quo; to pursue a peace settlement with the Arab World on the basis of the status quo.

However within this general framework there were variations.

During the period 1953-1956, the "status quo" policy tended to be flexible in the sense that there was willingness to force Arab acceptance of the status quo by means of a certain military strategy. Under the Eshkol government, there was an attempt at flexibility in a different direction, i.e. a political tactic based on "openness" towards the super-powers and also a very limited "openness" towards the Arab World. Thus under the two regimes there were attempts at flexibility, but these were of completely different natures. The flexibility of the second type was more akin to arms control measures.

(b) The basic strategy. Here there were two types of strategy: during the period 1953-1956 the emphasis was on compellence coupled with deterrence, which gradually became "compellence" coupled with "coercion", with the readiness to accept escalation to war rather than leave the state of affairs as they were. After the "Sinai War" of 1956 there was an abrupt change of policy. The need for reprisal subsided considerably; the exercise with compellence and coercion stopped, and to the extent that there were actions

along the borders they were limited to the border with Syria, where a particular state of affairs persisted. This particular state of affairs was a result of several elements:

(a) the general conflict between Israel and the Arab World;
 (b) the fact that Syria was the most extreme Arab nationalist state with a special tradition of animosity towards Israel;
 (c) the unsettled issues between Israel and Syria as states under the armistice agreements régime; (d) the Israeli-Jordan Water Project. Elements (b) and (c) were specific to the Israeli-Syrian conflict. Element (d) was part of the general Arab-Israeli conflict, but caused specific Israeli-Syrian tensions and clashes.⁽¹⁾

(c) The Military doctrine which was based both on a counter-force strategy and on an aggressive posture going down to the lowest units. The general idea of this was that once an attack occurs the only reaction should be counter-attack. Furthermore, under certain conditions there is a necessity to undertake pre-emptive strikes.

This basic military doctrine has been described in innumerable articles and several books, and recently several books published in Israel have elaborated at length upon the origins of this kind of tactics. Although the same tactics could be traced to the end of the thirties with the activities of the 'Special Night Companies', Hanodedet, and

(1) A detailed factual account of the Israeli-Syrian problems is supplied by M. Bar-Yaacov 'The Israeli-Syrian Armistice', The Magnes Press, The Hebrew University, Jerusalem, 1967.

mainly the Palmach, in which many future commanders of the Israeli forces participated, and although they were much more used during 'The War of Independence' of 1948, they received special significance during the fifties. Here two famous units of the Israeli Army, 'Unit 101' and the Paratroops, formulated or reemphasised this doctrine of quick aggressive response. This doctrine has been adopted by the Army and applied with great success in the 1967 war. (1)

The correlation or interaction between all these levels of foreign policy and strategy is one of the most important factors in the Arab-Israeli conflict, and has led to many misunderstandings. On the one hand, it is obvious that to a certain extent each affected the others, but at the same time it is also clear that observers tended to overlook the basic analytical differences between these levels. Thus many Arabs and foreign observers confused the strategic, tactical and political levels. For example, the notion of preemptive attack or preventive war, and the emphasis on aggressive posture on the tactical military level, led some observers to argue that this proved the 'imperialistic' intentions of Israel. This assumption was mistaken, as it overlooked the distinction between the level

(1) See among others, Uri Milstein Unit 101 and the Paratroops, (Hebrew), Tel-Aviv, 1968 ; Shabtai Tevet Hasufim Datzariach, (Hebrew), Tel-Aviv, 1967 ; Dr. Michael Bar-Zohar Toldot Hatzanachanim, (Hebrew), Tel-Aviv, 1968 ; Winston and Randolph Churchill The Six Days War, London, 1967 ; Some of the basic assumptions on which both the strategic and military doctrines are based were enumerated in Yigal Allon's Masach shel Chol (Hebrew), Tel-Aviv, 1960.

of foreign policy objectives and the other two levels.

However, it is true that the strategic and tactical level did influence the development of the conflict in two significant ways: First, by creating in the minds of many Arabs a set of images about the 'imperialistic' nature of Israel and thus aggravating the conflict; Second, by affecting directly the volume of violence along the borders. These two effects have direct relevance to the problem of nuclear weapons.⁽¹⁾

In some of their basic assumptions about arms control and disarmament, Israeli decision makers are very similar to other decision makers who face similar security and political problems. Thus the willingness to secure a military superiority, and to treat the enemy's declarations with the utmost suspicion and almost disregard them, are common to many decision makers in situations of states' conflicts. What perhaps contributed to the "style" of Israel's policy on disarmament and arms control were some elements that were peculiar to the Israeli-Arab conflict and to the nature of the Israeli people, as a pioneer society; a mistrust of military guarantees by big powers; a lack of a long tradition of diplomacy and war, and a lack of an intellectual approach to problems of foreign policy and defence. The last is not a reflection on the formal educational preparation of the decision makers who in some cases are intellectually highly capable, but on a lack of a general intellectual approach to these problems.

(1) See below in chapter VI.

The following are positions taken in Israel:

- (1) A call for complete disarmament in all sorts of weapons. In their repeated calls for this, Israeli decision makers sometimes resembled some of the earliest Soviet approaches to the same problem.
- (2) The insistence that the real danger in the Middle East was created by the deliveries of conventional arms to the Arab countries. These weapons were sophisticated and very developed and were being introduced into the Middle East in ever-increasing quantities.
- (3) As regards nuclear weapons in general, the acceptance of the idea of the need for general disarmament. There was ^{an} also/awareness of the growing need to end nuclear tests. Thus on 25.6.1962, Mrs. Golda Meir, the Israeli Foreign Minister at the time said: 'Israel regards the growth of nuclear armaments with great anxiety. Israel's policy is: to support in all possible ways the elimination of the terrible dangers which humanity faces as a result of the continuation of this terrible process. This is why Israel favours every measure which may limit and reduce nuclear weapons. The renewal of the tests was a terrible blow to the world. It is not only that the tests are a clear sign of the acceleration of the nuclear arms race with all its possible dark consequences, it is also that they (the tests) constitute a grave risk to the mental and physical health of our generation...'(1)

(1) See Knesset, Fifth Knesset, First session, vol. 36, p. 2432, (Free translation).

And in the same vein, The Knesset, following a recommendation by its Foreign and Defence Committee, decided that: '...It joins the unanimous resolutions of the Fiftieth Interparliamentary meeting convened in September in Brussels about the danger to human life and world peace caused by nuclear tests and calls upon all states, parliaments and governments to make every effort to arrive at an agreement on non-continuation of nuclear tests under efficient international control'.⁽¹⁾ The emphasis on 'effective control' may be interpreted as an acceptance of the Western position on the issue i.e. the need for some kind of "on the spot" control agreed by the two sides as part of an agreement about banning the tests. The Russians were against any such control. The logical consequence of this position was that Israel signed the Test-Ban Treaty on the 7th of August 1963.

(4) General Declaratory Position on Nuclear Proliferation

On several occasions Israel declared that it is opposed to nuclear proliferation. Thus in a reply to the Soviet proposal of 20.5.1963 which drew attention to the danger of nuclear arms in the Mediterranean area, Israel said: "The Government of Israel desires most solemnly to emphasize that every expression of appreciation as to the nuclear danger of/arming and of nuclear warfare, every initiative to labour for their prevention, evokes in it the most positive response. Again and again, and consistently, the Government

(1) See Knesset, Fifth Knesset, First Session, vol. 15, p. 876.

of Israel has given warning of the danger of nuclear armament, and at every opportunity has underlined its support of all measures designed, in practice as in theory, to avert the awesome peril.... On every international forum it has declared its readiness to support all measures likely to arrest the spread of the danger of nuclear weapons in every part of the world, and at all times, and naturally, it has included the Mediterranean region".⁽¹⁾

(5) Middle East: Complete Disarmament vs. Nuclear Disarmament

The official Israeli position was "that the issue is really not a partial disarmament from one kind of weapons but a general and complete disarmament of the Israeli and Arab forces, and to that end Israel is always ready to co-operate and to negotiate directly with the Arabs about it".⁽²⁾

This official position was based on various assumptions and carried various conclusions:

(a) The general notion, which (on the part of the Israeli decision makers) was partly hypocritical and partly sincere, that General and Complete Disarmament is possible and that one should work towards it. Although it is difficult to believe that mature and experienced politicians like Mr. Ben Gurion and others would discuss this notion with any sincerity,

(1) See The Israel Digest, Volume VI, No. 13.

(2) ibid.

it seems however that somewhere the notion of "and the wolf will lie down with the lamb.." has always had some impact on Israeli decision makers. This impact is probably the result of several elements:

The tremendous central position that the Bible has played in the formulation of the new cultural milieu of Israel;

The repeated and almost exasperating emphasis on the mission of the Prophets and their vision of the "End of Days", and on the idea that Israel should act according to this vision;

The basic notion of Zionism, which was concerned with the building of a new society, and would bring about not only a national but also a social reform.

It was not so much the direct impact of these ideas that created the above-mentioned attitudes to disarmament, but rather the fact that they supplied the symbols by which the leadership could formally communicate the body of ideas that forms part of the more "idealistic" notion of the role of Israel in the international system and in the international cultural framework. In other words, biblical visions of the remote future of humanity, plus socialist utopian ideas of the same future, were the only intellectual instruments with which the older Israeli leadership could define its utopian ideological targets. This was much more manifest in Ben-Gurion's approach than in Eshkol's attitudes, precisely because Ben-Gurion was more interested in being the intellectual and ideological mentor of Israel. That these same notions were very remote from

the rank and file of the people on the one hand and from the actual policies of Israel on the other hand, has contributed perhaps to cynicism, but at the same time has also had some influence on the formulation of some foreign policy targets. (1)

It is obvious, however, that the biblical impact included at the same time a completely different set of ideas and notions related to the conquering of the "Promised Land" and notions of war and military heroism. Thus it would be misleading to conclude that biblical influence was purely in the direction of creating, at least on the overt plane, attitudes reminiscent of the Prophet's mission. Perhaps the main lesson that Israelis learnt from the Bible was rather the second one. But a certain element of the Prophets' ideas were still there, and had some influence mainly among some of the older generation of decision makers.

(b) The assumption that if complete disarmament in the Middle East was ever to be secured, it would come after a solution of the basic problems outstanding between Israel and the Arabs. By suggesting General and Complete Disarmament the Israeli leadership pointed in fact to the need first to solve these political problems.

(c) General and Complete Disarmament could be arrived at only as a result of direct negotiations with the Arab countries. This notion of direct negotiations was and still is of

(1) These particular targets belong, perhaps, to what Holsti calls "universal long range goals". See his International Politics, p. 132.

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As a preliminary note one can say that perhaps even those decision makers who felt that conventional weapons gave Israel as much superiority over the Arabs as could practically be hoped for, felt that the economic price was too large and hoped that something could eventually be done to stop the conventional arms race. An added element was that the U.A.R., Syria and Iraq received arms very cheaply and could hope to receive more, whereas Israel had to pay much more for arms bought abroad.

(f) Most important of all, by arguing that Israel was interested in complete and general disarmament, the Government could avoid, or hope to avoid, discussion about the problem of nuclear weapons as a separate issue. It seemed reasonable on the part of the Government to do this if indeed it assumed that by having a great superiority over the Arab countries (and this in fact meant Egypt) as far as nuclear capabilities were concerned, it could use this superiority as a bargaining counter within a general discussion about the future of the arms race. This of course was not acceptable to those sections of public opinion which were convinced that the Israeli nuclear option was not an advantage in the first place. It is important, however, to note that by continuously concentrating on the notion of General and Complete Disarmament, be it as a tactic or otherwise, it is probable that the Israeli decision makers really became convinced that this was the only form disarmament or arms control could take.

These positions on arms control and disarmament were voiced mainly during the various debates in the Knesset on the arms race, and mainly in relation to the proposal advanced

by some opposition members for "The Middle East as a Nuclear Free Zone". The following is an account of the development of the official position on the problem of nuclear weapons in the Middle East and the possibility of some agreement on excluding them from that part of the world. Some positions persisted throughout the whole period under discussion, whereas others changed after the change of premiers from Eshkol to Ben Gurion.

One of the arguments advanced officially was that if the other side (meaning the Arabs) were not ready to discuss General and Complete Disarmament, there was no hope that they would discuss partial measures like nuclear agreements. (1)

Another argument was that in any case Israel was only involved in the development of atomic energy for peaceful uses, and therefore one could not understand the insistence on the problem of 'nuclear disarmament' or rather 'keeping nuclear weapons outside the Middle East'. The basic declaratory position of the Government has indeed always been that Israel is building a nuclear capability exclusively for peaceful uses. (2)

(1) Y. Harrary, Knesset, Fifth Knesset, First session, vol. 36, p. 2435, 25.6.1962; Ben Gurion, Knesset, Fifth Knesset, First Session, vol. 42, p. 3059, 6.8.1962.

(2) This position was first formulated by Mr. Ben Gurion in the Knesset 21.12.1960 after the news in the international press about the Dimona reactor.

A third and most important theme was that the real danger to peace in the Middle East lay in conventional arms being poured into the area. Furthermore, a demand to limit or ban one type of arms (meaning atomic weapons), would only divert attention from the real danger.⁽¹⁾

A fourth notion in the official position was that General and Complete Disarmament in the Middle East could be secured even before a General and Complete Disarmament could be achieved in the world at large. This was suggested for example by Mr. Ben Gurion in reply to the letter from Mr. Nehru during the Indio-Chinese war of 1962.⁽²⁾

A fifth element was the need for control of the proposed General and Complete Disarmament. This demand was almost always attached to the proposal. Usually the demand was for mutual reciprocal control over General and Complete Disarmament, i.e. control by Israel and the Arabs themselves, but sometimes there was the suggestion that the control could be under U.N. supervision. Thus for example on 5.6.1963, Mr. Ben Gurion in an answer to a question by

(1) For examples, see Z. Aran, Fifth Knesset, Fifth Session, Vol. 36, p. 2463, 26.6.1962; Ben Gurion, Knesset, Fifth Knesset, Second Session, vol. 27, pp. 1821-1824. As one example, p. 1823, Mr. Ben Gurion said: '...He who discusses only and exclusively a certain type of disarmament, a special disarmament, does not see reality as it really is and avoids seeing the danger facing us from conventional weapons - missiles, bombers, submarines, tanks and guns. All these are conventional weapons...'.
 (2) See Mrs. Golda Meir, at the time the Foreign Minister when she referred to this letter in Knesset, Fifth Knesset, Second Session, vol. 3, pp. 93-94, 12.11.1962.

Mr. Mikunis said: 'Undoubtedly the honourable member knows the Government position which was confirmed by the Knesset that we demand complete disarmament in Israel and the neighbouring Arab countries under mutual control, even before general disarmament is achieved. We shall agree to United Nations supervision as well in these countries (meaning Israel and the Arab countries - Y.E.) before international disarmament.' (1)

However, the whole idea of General and Complete Disarmament was considered as quite unrealistic by many Israeli decision makers themselves. They considered it unrealistic both for the two super powers and so far as the Arab Israeli area was concerned (although as far as the two super powers were concerned they modified their position after the Test Ban Treaty). Thus on 13.11.1962 Mrs. Meir pointed out that the Arabs were not ready for any proposal for disarmament of any kind. (2) An even clearer position was formulated by Mr. Aran when he said on the same day in answer to a Mapam leader who called for nuclear disarmament in the Middle East: '... The leader of Mapam argued in the political debate in favour of a resolution or declaration about nuclear disarmament of our region, before it arrived in our region'. He can say this with assurance as far as Israel is concerned. But he does not know what is happening

(1) See Knesset, Fifth Knesset, Second Session, vol. 30, p. 1985, 5.6.1963.

(2) See Knesset, Fifth Knesset, Second Session, vol. 3, p. 138.

in the field in Egypt. So what is the point that 'our government must stand at the head of those who struggle against this weapon in our region'? He speaks about agreed control by the two sides - is there any substance to such a slogan? For the last eleven years there have been negotiations between the two biggest powers in the world, powers which have peaceful relations and which declare their wish for coexistence; all this time there have been negotiations about nuclear disarmament and they have broken down because of the problem of mutual (or reciprocal - Y.E.) control. This only shows how this slogan is empty of any substance as far as our region is concerned, a region in which one side calls for exclusive existence and not coexistence, and hopes and wishes to destroy us. There is no use in preaching this, but it may cause harm. It will divert the attention of world public opinion to the problems of 'nuclear free zone in the Middle East' and from the real and close danger of an annihilating war against Israel, a war which will be conducted by conventional weapons....⁽¹⁾ What Mr. Aran was criticising here was the idea of nuclear disarmament under mutual (or reciprocal) control. However, by arguing that there was not even the slightest chance that mutual control could be successfully applied to such a partial measure, it seems rather obvious that he could not attach any credence to the possibility of successful control over the much more compre-

(1) Z. Aran, Fifth Knesset, Second Session, vol. 3, p. 132.

hensive measure of General and Complete Disarmament. The comparison with the Soviet position of the fifties and beginning of the sixties about General and Complete Disarmament in the world becomes even more striking.

The call for General and Complete Disarmament was aimed only at the Arab-Israeli area and not at other countries in the Middle East, presumably for the reason that Turkey and Iran were not involved in the conflict and also because they belonged to military alliances and thus a call for their joining a General and Complete Disarmament would have involved Israel in problems related to the bipolar relationship.

The beginning of the 1960's brought about a great change in the public atmosphere of Israel. This was the result of several factors. There was growing irritation at the continued leadership of Mr. Ben-Gurion. Equally, there was a feeling that security problems should play a smaller part in the life of the country; this took particular form in the suspicions that some of the younger lieutenants of Mr. Ben-Gurion were trying to use the enormous defence establishment to the advantage of their political ambitions. Equally, there were also suspicions among the old Mapai leadership that a new political élite concentrated around Mr. Ben-Gurion would try to take over the political leadership of the country after his retirement.

This general change of heart in the country brought about new alignments among political groups and parties, and eventually, when linked with the famous "Lavon affair" brought about an untenable situation for Mr. Ben-Gurion personally. Public opinion swung against him, the party machine and political élite felt that his leadership was more of a burden than an asset, and the other political parties increased their demands and showed growing apprehensions at his continuing leadership.

All this eventually forced his retirement and led to the establishment of a new government under the premiership of Mr. Eshkol. Following this change, there emerged eventually some significant changes in the foreign and defence policy of Israel.

(a) A switch of emphasis from the "special relationship" with France to the reestablishment of the "special relationship" with the U.S.A. There was a growing feeling that the U.S. was the only power which could be counted upon, and there were also hopes for the establishment of a permanent military relationship with either the U.S. or with Nato. This tendency, however, should be seen against the background of the Israeli image of international developments and the structure of the relationship between the two super-powers. Ben-Gurion had hoped to bring about a military pact between Israel and a big Western power (first with Britain and later with the U.S.A.) because he assumed a pure bipolar world where the bipolar conflict would continue, and he wanted Israel to be completely identified with the West. The Eshkol approach was rather different. He wanted a special military link with the West, because he again assumed a pure bipolar world, but one in which the two super-powers were becoming more reconciled, and in which participation in a military pact would ensure both the security of Israel and the status quo of the Middle East. All this could be done without provoking the Soviet Union. In other words, while Ben-Gurion was, in his actions at least, ready to endanger the status quo by pointing out the dangers of Soviet penetration in the Middle East, Eshkol started to act as if the relations between the two super-powers in general and in the Middle East in particular were such as to permit, with Soviet help, the stabilisation of the status quo.

in the Middle East. Thus, he appeared to be ready to accept the possibility of an arrangement between the two super powers which would insure the status quo. Israeli participation in a military alliance with the West would enhance the status quo in the Middle East, and provided that the Soviet Union was interested in the status quo, such a military alliance with the West would not affect Israel-Soviet relations. The Soviet Union would participate in the maintenance of the status quo.

(b) Precisely because Eshkol differed in his perception of the bipolar relationship, he assumed, and possibly rightly so, that the strengthening of relations with the U.S.A. might even improve Israel's relations with the Soviet Union. He assumed a growing détente between the two super powers, and this belief was fortified by the Test Ban Treaty in the same year that Eshkol came into power.

This analysis does not necessarily mean that either Ben-Gurion or Eshkol had an articulated view of the structure of the international system. The approaches of both Ben-Gurion and Eshkol were normally influenced by day to day necessities and calculations,⁽¹⁾ which dominated their

(1) In an article in "Davar" - the paper of Mapai and hence mouthpiece of the Government, H. Danzig argued that there were new challenges and possibilities facing the Eshkol government. These changes were the result not of a change in the new government's attitudes - the new government continued in the policy of "peace and security" of the old government under Ben-Gurion - but they were caused by changes in the international situation. And he called upon the government to pursue these new possibilities. These were mainly concerned with the gradual rapprochement of the two super-powers on the one hand and the break up of some of the old blocs. By such formulation, Mr. Danzig, like many other semi-official commentators, tried to prove that there was no real change between the two governments, but at the same time pointed out precisely to the potential for change (see Davar 9.8.1963).

actions possibly even more than in other states. They were influenced by the changes in the relations between the super powers, and the differences between their two policies were also the result of differences in temperament and general personal outlook. But granting all these qualifications, some basic differences in the principles of their foreign policy were still there.⁽¹⁾

(c) A more relaxed attitude towards the Israeli-Arab conflict. There was no question of revolutionary changes in basic Israeli attitudes and policies, but more emphasis was to be put on finding ways to decrease existing tensions by avoiding a 'forward strategy'. This policy however was not carried out, through a combination of several factors. These were the combination of the opening of the Jordan Water Project,

(1) The differences between Ben-Gurion and Eshkol in their perceptions of the bipolar relationship could be put to an extent within that part of the theoretical framework suggested by Michael Brecher in 'Research on Foreign Policy Behaviour', Journal of Conflict Resolution, March 1969, which deals with elite images of various aspects of reality. Brecher has used this framework in 'Ben-Gurion and Sharett: Contrasting Israeli Images of the Arabs', The New Middle East, No. 18, March 1969. On the link between elite images and foreign policy decisions see also Kenneth Eoulding, 'National Images and International Systems', Journal of Conflict Resolution, June 1959.

the beginning of Fatah activities (in January 1965) and Israeli reactions to it, and the growing competition within the Arab World.

(d) Basically, however, Mr. Eshkol, like his predecessors, and indeed any possible Israeli Premier, continued to put great emphasis on building the independent military capability of Israel. The army was considered as the only guarantor of the existence of the country. What is interesting is that because he arrived in the field of defence after Ben-Gurion (who was identified in the public image with the army) and because almost from the very first moment he was under heavy attack from Ben-Gurion, Eshkol had to prove that the security needs of the country would not be neglected. This produced the interesting phenomenon of a fundamental increase in the defence budget during Eshkol's regime. This was also partly due to the ability of the new Chief of Staff, General Rabin, who knew how to secure the means for the army's needs.⁽¹⁾

(e) Although the defence budget had increased considerably, and thus incidentally contributed on its part to the growing arms race in the region, much more emphasis was put on economic and social questions. This, coupled with the feeling that a war was not imminent (the assumption - at least of Mr. Eshkol - was that if a war were to occur it

(1) See on this last point Amos Perelmuter 'Army and State in Israel', London, 1969; p 106

would not occur before 1970 and this was also the basis on which military planning was conducted⁽¹⁾), enabled the government to pursue economic policies, directed - at the expense of public consumption - toward achieving economic independence. The whole public debate became much more concerned with economic and social problems and this helped to influence, and was in turn influenced by, government policy.

As concerning nuclear programmes, there gradually appeared a change in attitudes and also in policies. As far as the policies were concerned, a certain change had already taken place under Ben Gurion, in the sense that programmes for nuclear development were postponed in order to divert money to conventional arms. This decision was taken by Mr. Ben-Gurion after a serious debate about the future strategic doctrine of Israel. In this debate Allon demanded investment of resources in armour and the Air Force, whereas Peres and Dayan demanded that the emphasis should be placed on 'scientific development ... and deterrence force' and suggested that Israel should: '...equip Zahal, for Tomorrow'. Ben-Gurion decided to adopt the Allon approach as far as application of resources was concerned but opposed the preemptive strategy suggested by Allon.⁽²⁾

(1) See Shlomo Nakdimon, 'Likrat She'at Ha'effes', (Hebrew), Ramdor, Tel-Aviv, 1968, p. 208. Nakdimon quotes a speech by Eshkol made during the 1967 crisis.

(2) See Moshe A. Gilboa, 'Shesh Shanim Shisha Yamim' (Hebrew; 'Six Days Six Years'), Am Oved, Second Edition, March 1969 pp. 29-30. In an article in 'Ma'ariv' on 12.7.1963 Dayan argued that Egypt is developing nuclear weapons and thus the only way for Israel to meet such a threat was to have similar weapons. (See 'Southern African Jewish Times', 19.7.1963)

However, apart from budgetary considerations, there were several other important political and strategic problems involved in the issue of future nuclear developments.

As far as these were concerned, there was a change after the advent of the Eshkol government. This can be seen under two headings: first the application in full of the Allon approach. This approach was defined in 'Masach shel Chol' and in his article in 'Molad',⁽¹⁾ in which he pointed out that from the Israeli point of view, nuclear weapons in the hands of both sides - Israel and the U.A.R. - was a worse situation than if no nuclear weapons at all were in the hands of either side.⁽²⁾ As for the feasibility of nuclear weapons in the hands of the Arabs, one school of thought in Israel had always argued that whatever weapons Israel succeeded in acquiring, the other side would also acquire them.⁽³⁾ (This belief underlined much of, at least,

- (1) The article was published after the Six Day War but was in fact originally delivered as a speech at the beginning of 1966. See Molad, July-August 1967.
- (2) This attitude has been clearly defined in a discussion on 17.3.1964, where Mr. Galili who like Mr. Allon belongs to Achdut Ha'avodah, said: '...I have pointed to the danger of missiles as a real and close danger, but one should not misunderstand my opinion about the danger of nuclear weapons. If it is in the hands of Israel to choose whether nuclear weapons will be placed in the hands of both Israel and Egypt or will not be in the hands of either, Israel must prefer that it will not be in the hands of either, for if it is in the hands of one it will be in the hands of the other as well...' (Knesset, Fifth Knesset, Third Session, vol. 24, p.1440). (See also below in the passage on 'Attitudes in the Eshkol Government towards General and Complete Disarmament in the Middle East').
- (3) On this, see inter-alia, "Symposium on Foreign Policy", Ot, Vol. 1, No. 6, September 1966 and also in what Galili said in the Knesset.

the declaratory positions of a large part of public opinion in Israel. It is not however clear whether it was the opinion of men like Peres, who emphasised many times the possibility of using Israel's technological and scientific superiority vis-à-vis the Arabs in order to achieve qualitative superiority in the field of armaments). The attitude of men like Allon did not however mean that they were against a nuclear option. The question was what kind of an option.

The second heading under which this question must be considered is the growing willingness to bring about closer relations with the U.S. This, as has been stated above, was one of the basic modifications in Israel's foreign and defence policy after Eshkol came to power. This change had several applications, not least the effort on the part of Israel to achieve a formal military guarantee from the U.S. In that respect Eshkol tried to pursue the same objective as Ben-Gurion, but in a different international milieu. Whereas during the fifties such a military agreement would have entailed, perhaps, a worsening of the already sometimes bad, sometimes ^{indifferent} attitude of the Russians towards Israel, it may, during the Sixties, have had a different effect, precisely because of the growing atmosphere of détente from 1962 onwards, and also, perhaps, because such a military guarantee would have secured a stable bipolar system in the Israeli-Arab region. However, such a formal military guarantee was not forthcoming, and thus the possibility of securing a balanced bipolar system in the Middle East was not put to the test.

Both these factors contributed to a change in the policy of the Eshkol government on the question of nuclear weapons. As far as the 'American angle' was concerned, part of the change was perhaps due to the feeling that the American Administration was ready to supply arms in order to keep the balance in arms between Israel and her neighbours. At least Mr. Eban saw this as a very important policy change on the part of the U.S.A.⁽¹⁾ This change of heart on the part of the American administration which was due to a change in the Israeli position and also perhaps to a change of perceptions about the Middle East, brought about some relaxation in the American position on the 'delicate matter', as the atomic development in Israel was termed in the context of the negotiations between Israel and the U.S.A.

Attitudes during the Eshkol government towards General and Complete Disarmament in the Middle East

Differences between the Eshkol regime and the Ben-Gurion regime in the field of foreign and defence policy started to emerge only gradually. Thus in the field of disarmament, the official position at the beginning of the Eshkol Government remained that Israel should not concern itself with the issue of nuclear disarmament in the Middle East, as the real issue was the conventional arms race, in which the Arabs (mainly but not exclusively the U.A.R.) had

(1) See 'Ot', Vol. 1, No. 6, September 1966.

taken the lead with the generous help of the Soviet Union. In any case, Israel was ready to negotiate General and Complete Disarmament under mutual control and with United Nations control.⁽¹⁾ However, Eshkol had perhaps slightly modified the official position, first by mentioning the possibility of international control⁽²⁾, and secondly by pointing out later on that nuclear weapons were one of the categories of arms that would be included in any General and Complete Disarmament for the Arab countries and Israel.⁽³⁾ He quoted a speech by Mrs. Meir, the Israeli Foreign Minister, in the United Nations General Assembly, where she suggested that the two sides would start negotiations in order to achieve General and Complete Disarmament under mutual supervision which would include all the categories of weapons.

A more realistic approach in Eshkol's attitudes about disarmament and arms control appeared subsequently, when he called upon the big powers (the United States, The Soviet Union, France and Britain) to accept some basic political principles about the Middle East, one of which would be to halt the arms race while keeping a stable security balance to deter aggression. For this purpose

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- (1) See Eshkol and Argov, Knesset, Fifth Knesset, Second Session, Vol. 33, pp. 2203-2204, 26.6.1963, and again on 7.8.1963 when Eshkol called for a General and Complete Disarmament in Israel and the Arab countries and used the phrase, "under mutual control and international control".
- (2) Ben-Gurion had mentioned United Nations control, (see p. 155) but usually the demand during his Premiership was for reciprocal control.
- (3) See his speech on 17.2.1964.

there was no need for control. It could be simply achieved by the big powers if they did not supply destructive arms.⁽¹⁾

An even more realistic note, admittedly from Galili, was struck when he said in the Knesset on 13.10.1964, that Israel must demand, among other things... "...a general agreement on gradual disarmament, agreed and under mutual control to avoid the spread of nuclear weapons into the area". (By emphasising the need for "mutual control", Galili might have meant in fact that no such plan was realistic, because the Arabs were surely not expected to agree to that. However, he struck a middle ground between other spokesmen of the government who insisted on General and Complete Disarmament and the opposition who called for Israeli initiative against the spread of nuclear weapons into the "area".)

From now on different and sometimes contradictory voices were heard. Thus Israel's Ambassador to the U.S., Mr. Eban, in a press conference in New York, was quoted as saying, "...that an agreement to keep the 'region' free from nuclear weapons is of course welcomed".⁽²⁾ While, on that very same day, Mrs. Meir, the Foreign Minister, formulated again Israel's policy in this field by saying "...our declared policy is to pursue a complete and comprehensive disarmament under mutual control, between us and our Arab neighbours". On 30.3.1965 Mrs. Meir again called for

(1) Knesset, 20.7.1964.

(2) See Barzilai, 29.3.1965, in the Knesset.

disarmament in conventional weapons and added that the demand for nuclear disarmament was ridiculous because it referred to a weapon which was not as yet in the Middle East, while the real danger was constituted by conventional weapons flowing into Egypt. (1)

On 25.5.1965, Mr. Eshkol criticized the paragraph in the Mapam Party's programme which called for "atomic disarmament as a first step towards general disarmament". Eshkol argued that as no country in the region had atomic weapons, the real meaning of the programme was to rid "ourselves" of a weapon that was not there at all, and to let the other side pursue his armaments which were really dangerous. (2)

Mr. Eban in an answer to a question in the Knesset, said: "Israel has always backed general disarmament inclusive of nuclear weapons, in the world and in the region. It joined the Test Ban Treaty.....Only two weeks ago the Israeli representative in the political committee of the U.N. declared Israel's endorsement of the resolution calling for an international committee to be convened to discuss disarmament....." There is no point therefore in blaming Israel for apathy or lack of a principled approach to problems of disarmament in the world." (3)

But apart from the general call for General and Complete Disarmament in the Arab-Israeli region there were

(1) Knesset, Fifth Knesset, Fourth Session, Vol. 25.

(2) Knesset, Fifth Knesset, Fourth Session, Vol. 28.

(3) Fifth Knesset, Session I, Vol. 6, p. 106.

also official doubts as to the possibility of the Arabs agreeing to sit together with Israel to discuss nuclear disarmament. Thus⁽¹⁾ Mrs. Meir argued that it was not at all clear that following an Israeli declaration of a readiness to discuss nuclear disarmament, Nasser would be willing to discuss it with Israel.

But the general tone of the Eshkol government changed. On 1965, Eshkol had suggested a new formula for Israel's nuclear policy, namely that "Israel will not be the first to introduce nuclear weapons into the Middle East". By this changed formula more certainty about Israel's intentions in this field had been introduced. This new formula found its formulation in the Knesset itself. It had perhaps its impact on the following statement made by Eshkol in the Knesset, on 12.1.1966, namely that "We shall try within the limits of our capabilities to work for international agreements and regional agreements for the advancement of limitations of arms and for disarmament, inclusive of atomic weapons, under mutual control".

The basic assumption remained that arms limitations agreements between Israel and the Arab countries were possible only when basic political attitudes had changed.⁽²⁾

(1) Knesset VI, Session 1, Vol. 6, p. 282. (This was said within a very serious discussion of the new stage in the arms race in the Middle East in which some major arms deals were signed between some Western powers and some Arab countries.)

(2) See Eban, Knesset, Sixth Knesset, First Session, Vol. 18, p. 1120.

Another assumption which remained unchanged was that Israel would not initiate negotiations about nuclear disarmament. (1)

On 18.5.1966 the new formula was stated and elaborated upon in the Knesset. Thus on that date Eshkol said '... I am sorry that the President of Egypt is trying to deceive the people and to divert attention from the dangers constituted by the offensive weapons which exist in the region to nuclear weapons which are not in our region and which we do not want to be here. I have said before and I repeat here that Israel does not have nuclear weapons and that Israel will not be the first to introduce them into the region. He ... who really wishes to take away from the people living in the Middle East the fear of the arms race ... should work for general disarmament in the Middle East, or at least limitations of armaments of all kinds, while striking a reasonable balance ... inclusive of ban on the introduction of nuclear weapons into our region... '

'... We have noted with satisfaction that the idea of regional conventional disarmament or regional disarmament has recently been suggested in the Eighteen Nation Committee on Disarmament, this as a first step towards general disarmament... '(2)

(1) See David Hacohen, Sixth Knesset, First Session, Vol. 18, p. 1126.

(2) See Knesset, 18.5.1966.

It is clear from this important passage that Israel had clarified its position ('Israel will not be the first to introduce nuclear weapons etc. '), and had also indicated that the problem of nuclear weapons could be negotiated within the framework of general negotiations on disarmament or arms control in the region. An important and basic implication of this change in posture, was that the option could be used more freely to gain political objectives, without at the same time involving the general problem of nuclear proliferation. Thus a distinction was drawn between the political uses of the option and problems of proliferation.

What also emerged from the same speech by Eshkol in the Knesset (although not from the passage quoted above) was (a) that the big powers must take the initiative in working towards limitations on the conventional arms race in the Middle East; (b) that a real and comprehensive agreement could be secured only when the big powers agreed to guarantee the territorial status quo and peace in the area.

These two points show two possible uses of the nuclear option Israel had acquired i.e. securing big powers' guarantees for the territorial status quo and limitations on conventional weapons as a quid pro quo for not 'going nuclear'. However in order not to raise anxieties Eshkol categorically declared that Israel would not be the first to introduce those weapons into the area.

Even the Communist leader Mikunis conceded on 23.5.1966, that there had been a change in the Israeli official position on nuclear affairs (he referred to the declaration that Israel would not be the first to introduce nuclear weapons into the Middle East), and that within the framework of a regional agreement on disarmament or limitations of arms there would be included an article banning the introduction of nuclear weapons. But in Mikunis' opinion this was not enough. Mr. Hacoheh on the government side reiterated the official position that Israel would not be the first to introduce nuclear weapons into the Middle East. At the same time he criticised Nasser for his threats of a preventive war if Israel intended to introduce such weapons into the Middle East.⁽¹⁾

In answers to questions in the Knesset on 13.2.1967 Eshkol discussed Israel's position toward nuclear weapons. He was asked whether Israel would be ready to agree to U.N. supervision of nuclear reactors in Israel and the Arab countries. Here Eshkol again stated that Israel demanded General and Complete Disarmament in the Middle East inclusive of nuclear weapons, under mutual control. At least there was a need for limitations of arms of all sorts while keeping a reasonable balance. If there was a question of stages, then the first stage was to solve the problem of conventional arms and only after that of other arms, which, in any case, were not yet present in the Middle East. There is here perhaps a retreat to the previous tougher position, but this is not clear.

(1) Knesset, 23.5.1966.

THE PUBLIC DEBATE IN ISRAEL

The development of the nuclear option in Israel triggered a limited debate in the country. The debate evolved around the question of what is the best "nuclear" policy to be pursued.

A distinction should be drawn between the public debate on the one hand and the debate among the decision makers on the other hand about the proper policy to be adopted towards nuclear problems. The second debate was not usually conducted in the open and thus it is hard to cover it comprehensively. In addition to the usual difficulties in such a case, which are common to all states, including democratic societies like that of Israel, there were three additional obstacles to an open and intensive debate.

First, there was the consideration that by discussing nuclear issues openly, there was a danger either of starting a nuclear arms race in the Middle East or inviting American pressure on Israel. This last point accounted for the attempts to prevent the whole Dimona project from becoming known internationally⁽¹⁾. There was possibly also a fear in Israel that disclosures about Dimona would precipitate Russian nuclear aid to Egypt.

(1) For attempts to suppress public debate on the nuclear issues, see for example report in Jewish Observer, 6.7.1962.

The fear that the Soviet Union might give large scale nuclear aid to Egypt if the nature of the Dimona project were revealed, was found to be mistaken. Israeli fears and anxieties about possible outside aid to Egypt in the nuclear field switched to the possibility of Indian or Chinese technological and scientific aid. It was expected that this might be coming in the form of knowhow and perhaps also technical aid.

Second, Israel adopted for a long time the notion that her efforts were directed solely at producing atomic energy for peaceful uses and that there was no intention of creating a nuclear option. Thus any open debate on issues of strategic doctrines related to nuclear affairs was considered to be out of place. This was also the reason for attempts to suppress public debate on the subject.

Third, the whole question of problems of defence in Israel was thought best kept out of open debate. This approach started to change at the beginning of the sixties, but was still applied to a much larger extent than in comparable societies. One of the consequences of this approach was that the debate on foreign policy as well suffered considerably. The area of interaction between strategy and foreign policy is considerable everywhere, but much more so in Israel. The avoidance of an open and active discussion of strategic problems in Israel made the debate on foreign policy more difficult. Not only strategic problems but also the different military activities along the border and even arms acquisition problems affected foreign policy, rather than vice versa.

It seems probable that Israel at the time (late 1950's) underestimated the strength of the American anti-proliferation mood, a mood which became much stronger towards the beginning of the 1960's and later.

Another element should be added here in order to understand the attitudes in Israel towards secrecy in this context, an element which is a product of the whole nature of the Israeli society. After the growth of underground military organizations in the Jewish national community in Israel, a heavy premium was placed on two things. First, the role of secrecy in everything even remotely related to security. Second, the notion that once something is started or on its way, it is very difficult for an outside power to stop it. Israel has a tradition of strongly resisting outside interference and pressures.

This notion perhaps contributed to the assumption that if indeed Israel was able to reach a certain stage in the Dimona project, this by itself would be a worthwhile achievement, even if at that stage outside pressures were to start.

All these considerations were valid and important. However, once the nature of the project became known internationally, the secrecy under which the project was built only increased suspicions and anxieties in the international community, perhaps more than would have been the case if the project had been openly built from the beginning. These suspicions and anxieties were increased at the beginning

at least, by the attempts at the suppression of debate in Israel itself.

Obviously because of the official Israeli attitude the whole atmosphere was not conducive to an open debate on the nuclear issue. It appears also that even among the decision makers the debate was not as informed as it should, and possibly could, have been, a fact which is related to the process of decision making in Israel. Because of its small size, but even more because of lack of attention to such matters, there have not been institutionalised agencies for planning and advice on many problems in which foreign policy and strategy interact. Thus the decision-makers did not enjoy the advantage of being supplied - on a continuous basis - by informed advice on these issues.

Notwithstanding all these obstacles, some debate did take place both among decision-makers and also in the public at large. The debate among the decision-makers suffered from the lack of open intellectual communication with institutions of research and with 'informed public opinion', whereas the public debate suffered from lack of information. Apart from all this, side issues became involved in this debate, some of them concerned with domestic politics; and this again was scarcely conducive to a comprehensive and high level debate.

The basic debate among the decision-makers, although chiefly carried out behind closed doors, did percolate outside

gradually, and especially towards the middle of the sixties. It came to the open in debates in the Knesset and in some other public debates although even then it remained rather limited. (1)

Three general schools of thought could be discerned in both debates: (a) those who favoured a full nuclear weapons programme; (b) those who wanted to see Israel developing a nuclear option, and only an option, and were opposed to nuclear weapons; (c) those who were opposed to the creation of an option. This category would presumably have been against any nuclear programme in the first place.

One of the difficulties in distinguishing the various schools of thought is that sometimes adherents of the first view would appear to favour a nuclear option, and not a full scale programme. There were several reasons for this: First that if they were decision-makers they could not appear to favour a full scale programme while the government position was opposed to it, and second that some members of this school of thought possibly hoped that by advocating an option, there were good grounds for believing that eventually the option would be invoked. Thus, practically, it made no difference whether one advocated an option or a full scale programme. Third, in the jargon developed specially for the purpose of discussion of the nuclear issues in Israel, the term 'nuclear option' was sometimes used in fact to describe a full scale weapons' programme. Only later on

(1) For fuller details see Chapter 3.

when the debaters became slightly more sophisticated and used to the international terms used in these discussions was a distinction made between 'nuclear options' in the above-mentioned sense and nuclear options. But even later on some confusion persisted.

Adherents of the third school of thought also tended sometimes to describe a full scale weapons' programme as a 'nuclear option', this time because of reasons (2) and (3) suggested above. Thus for partly semantic reasons the debate suffered in substance. Another problem was the confusion or at least overspilling of the debate about arms control and disarmament into the debate on the basic issues of nuclear weapons. Obviously these are related problems, but at least an analytical distinction should have been drawn between them. Thus the notion of 'The Middle East as a nuclear free zone' ⁽¹⁾ had been advanced partly as a genuine proposal and partly as a way of arguing against possible military uses of nuclear programmes in Israel. Instead of arguing against such possible programmes directly, the opposition used the idea of MENFZ.

Soon after the first disclosures of the Dimona project in the foreign press, a muted and limited public debate began on the nature of the project and also on the nature of nuclear weapons and their relevance to the Middle East.

(1) Would be referred to in the text as MENFZ. For purpose of convenience, this would also cover the proposal of 'The Israel-Arab Region as a Nuclear Free Zone'. The difference between these two concepts will be clarified below.

The public debate developed gradually and painfully, one of the main platforms for debate being the Knesset, whereas newspapers and journals only joined the discussion later. The discussion in the Knesset gradually became more detailed and free, and indeed many of the main positions on the question were voiced with some degree of elaboration in the Knesset. However the debate lacked, and still lacks, the sophistication which was a characteristic in other potential nuclear powers, let alone places like the United States or Britain.

One of the reasons for the low level of the debate in general was the gap between the academic community and the defence establishment as far as strategic thinking and foreign policy issues were concerned. (In the field of the natural sciences the situation was very different.) This gap did not necessarily mean a difference in basic attitudes, but a lack of understanding of the real need for high level intellectual discourse on these issues between the two sides.

The different political parties' positions

A valid distinction of categories could be made both between some parties and inside the various parties as far as the nuclear issues were concerned. Because of the importance of Mapai in the political scene in Israel, as the main party and the one expected to remain in power in the future, this particular party refrained from openly debating these issues. An open debate would have meant disclosure of

official policy or interference with what was considered the domain of the group of decision-makers involved in such issues. This does not mean that there were no differences of opinion on these issues within Mapai, but to the extent that those existed they were confined to the debate inside the government and the other forums of decision-making. This situation seemed very different from the one existing in India, where a very extensive and open debate inside the Congress Party went on from almost immediately after the first Chinese nuclear test. The position of Mapai as a party on the nuclear issue could therefore be described as identical with the government position. Such differences as might have existed never reached the level of an open public debate. This lack of debate was more regrettable precisely because it was in the Mapai party that any possible decisions on foreign and defence policy were really being taken. This of course is true to the extent that such decisions were taken at all within the framework of any political party. As a general rule one could argue that under Ben-Gurion's regime, decisions on foreign policy and defence policy were taken almost always by a very small group which was headed by Ben-Gurion himself and was composed of his close advisers. The role of the government as a whole in these matters was rather limited. However, even within this structure of decision-making something had changed in the early sixties. A general debate on nuclear policy took place in 1963⁽¹⁾. In this debate the role of Allon who was a member of the government and a member of Achdut Ha'avodah was quite significant in that he argued that the building of a

(1) See pp. 163-4.

conventional capability was more important than the building of 'a nuclear option'. Thus it seems that the position of Achdut Ha'avodah as a political party within the context of the debate on the nuclear issues, was important or rather began to be important after about 1962, in the sense that some personalities from this party influenced the actual decisions about these matters.

Achdut Ha'avodah

The main approach of this party to the problem of nuclear weapons and the atomic issue in Israel had been voiced by Allon and to a lesser degree by Galili. As far as Allon is concerned his opinions were formulated in the second edition of his book 'Masach shel Chol' and before that in a long article published in an Israeli monthly 'Molad'. In both places Allon developed his notion of a 'pre-emptive strike' against the Arab armies, predominantly the Egyptian army, in six hypothetical situations:

- (a) a concentration of offensive troops constituting a danger for Israel;
- (b) when it became clear that the enemy was preparing a surprise attack on Israel's airforce bases;
- (c) if there was a limited air strike at Israel's nuclear reactors and research institutions;
- (d) if guerilla warfare against Israel reached dimensions where defensive measures and reprisal attacks could not overcome them;
- (e) if Jordan joined a military pact with another Arab country and allowed foreign Arab troops to concentrate in her area, and especially west of the Jordan river;
- (f) if Egypt closed the straits of Tiran.

Each one of those steps should constitute a casus-belli for Israel, which would have

to be followed by a pre-emptive strike. (Allon defined 'pre-emptive strike' in a way similar to that used in international literature, that is: 'an (Israeli) operational military initiative against enemy military concentrations and the taking of enemy objectives which have a vital security importance, when the enemy has formed itself into an offensive posture and before he has actually started his offensive' (1). However the list of casus belli given by Allon corresponds only partly to this kind of definition of pre-emptive strike.)

It seems logical that adherence to such a doctrine of pre-emptive strike which in fact broadens the causes for war beyond the immediate possibility of attack by an enemy, implies a high flexibility on the part of Israel, and readiness to use conventional troops liberally. Indeed Allon, sticking to this position, opposed the notion of 'a balance of deterrence' in which nuclear weapons constituted the instrument of stability. In the above publications and elsewhere Allon insisted that in order to maintain the flexibility of Israel's strategy it was preferable not to 'go nuclear'. He realised the differences between the situation that obtained between the two super powers on the one hand and the situation between Israel and the Arab states on the other hand. The main difference, in his mind, was that the regimes in the Arab countries were 'militant, unstable and unreasonable and that there is a danger that they would not be able to resist the temptation of a first strike'. (2) Thus if both sides possessed nuclear bombs,

(1) See Molad July-August 1967, p. 142.

(2) ibid.

there would be no 'balance of terror'. Israel, maintained Allon, could not live under the permanent danger of nuclear annihilation. Another reason for his position was that it was precisely by conventional troops that Israel could maintain its military superiority over the Arab armies. In another part of his article, he maintained that at least two generations, if that, would pass before the factor of time began to operate against Israel. Although he advanced this argument within a different context, it is obvious that his conclusion was that there was no need to fear a possible Arab superiority in conventional weapons for a very long time indeed.

At the same time it is evident that Allon favoured a nuclear option. The question of what level this option should reach was not clarified in his publications or open pronouncements. However on a certain occasion when he addressed a meeting in London, he said that Israel would not be the first country to introduce nuclear weapons into the Middle East but it would not be the second either. This position implies a nuclear option at a high level.

The main point in Allon's position remained that 'if I have to choose between nuclear weapons in the hands of both sides, for the sake of a balance of deterrence, and eliminating this possibility, namely that both sides will not have it, I would prefer a balance of power maintained by conventional weapons and not by nuclear ones'.⁽¹⁾

(1) See Molad, op. cit., p. 143.

This approach was reflected in the position of Achdut Ha'avodah towards the problems of arms limitations. Thus on 13.11.1962, in a debate in the Knesset, Mr. Israel Galili, another important leader of Achdut Ha'avodah, who later became Minister of Information and eventually a closer adviser of the present (1970) Prime Minister of Israel, Mrs. Golda Meir, said that he favoured an agreement which would ban the introduction of nuclear weapons into the Arab-Israel area, and that this agreement should be under mutual control. He added that this would be a stage on the way to secure an agreement on general disarmament in the Arab-Israel area. Concern about the possibility of the introduction of nuclear weapons into the area prompted Mr. Galili even earlier to say in the Knesset on 26.6.1962 that Israel should cooperate with any political power in order to participate in an effort of which the objective was that the "arms race in the Middle East will not deteriorate into a nuclear race". And again, on the 17th March 1964, Galili stated in the Knesset that it was preferable that neither Israel nor Egypt should have nuclear weapons. If one of them acquired such weapons, added Galili, the other would have them as well. ⁽¹⁾

This position of the leaders of Achdut Ha'avodah became even more important after the gradual rapprochement between this party and the main political party - Mapai, a development which led eventually to the establishment in February 1965 of the "Alliance" in which the two parties participated.

(1) Knesset, Fifth Knesset, Third Session, vol. 22, p. 1440.

The position of the Achdut Ha'avodah on nuclear questions was partly related to their conviction that nuclear developments were somehow connected with the 'European Orientation' which had developed during the Ben-Gurion regime and which was advanced with great persistence by Peres. This orientation meant, first, links with France, and more menacing - as far as Achdut Ha'avodah was concerned - with West Germany as well. What made this even more suspicious in their eyes were the rumours about West Germany's ambitions in the nuclear field and their influence on nuclear developments in Israel. Thus Moshe Carmel, another of Achdut Ha'avodah leaders, said on 22.10.1963: '... the debate on 'European orientation' or 'American orientation' renews barren debates of times past about 'guarantees' and 'a defence treaty' and switches the focus of our security problems from self reliance to dependence on foreign help. The economic, technological and military growth and strengthening of Egypt necessitates an accelerated growth of Zahal, the raising of its quality and the increase in its capability. All this in order that Zahal will maintain in the future as well as before decisive superiority over any possible joint Arab military power that could be created in the Arab World...' He added that this did not mean that Israel should cease to try to secure friends in the world, friends that were needed both for future international campaigns and as sources of weapons' supplies. 'However', he stated 'there is a great distance between this approach and the one which casts its fate on the growth and strengthening of Germany, or on the growth and strengthening of the European Continent under the

leadership of Germany - even if somebody calls this approach 'an orientation on ourselves',⁽¹⁾ - this distance can be like the distance between existence and annihilation.'

'Israel's security cannot depend on Germany, a Germany which aspires also to have nuclear weapons, a Germany which itself is a focus for international tension...'⁽²⁾

The position of Rafi

After the establishment of Rafi in June 1965 under the leadership of Ben-Gurion and with the participation of Dayan and Peres, the public debate on problems of defence and foreign policy was increasingly channelled into the differences between the "Alliance" on the one hand and Rafi on the other hand. This was because some of the main former decision-makers (who now were in Rafi) were anxious to attack the ruling Alliance, and decided to do this partly in the above-mentioned fields. Some Rafi members were among the main advocates of a nuclear effort in Israel. It seems likely that some of them favoured a full fledged nuclear weapons' programme, while others favoured a nuclear option on a high level. The ground was therefore fertile for a full scale debate on these matters.

However even Rafi members never stated openly that Israel should 'go nuclear'. Instead there evolved a new doctrine that probably became accepted by some Alliance

(1) This is the literal rendering of the Hebrew phrase which means a self reliance policy.

(2) See Knesset, Fifth Knesset, Third Session, vol. 1, p. 28.

members as well. This doctrine is what one might term as a 'psychological nuclear option deterrent', and probably consisted of several elements: (a) the threat that Israel may go nuclear would suffice to deter the Arabs from attacking Israel; (b) the creation of a nuclear option would prove to the Arabs the scientific and technological superiority of Israel, and thus would deter them from ever contemplating an attack on Israel. The Arab countries would realise that because of Israel's scientific capabilities, she was unbeatable. In short, the nuclear option would serve as a symbolic reminder of Israel's will for survival and its capability to sustain this will. To the extent that the Arabs would be humiliated and frustrated by this Israeli superiority, this would act as a deterrent by itself. Thus the option would be used also for "deterrence by frustration". (c) An option at a high level would prove to the Arabs their inability to compete with Israel in the field of atomic development. The Arabs would realise that they were unable to compete with Israel in this field and this on its own part would contribute to the general deterrence posture of Israel. This kind of use of the nuclear option is similar to the use of the option as a deterrent against an attempt by the Arabs to go nuclear themselves. This in fact is the meaning of Allon's position when he said that 'Israel will not be the first to introduce nuclear weapons into the Middle East but it will also not be the second'⁽¹⁾. (d) As the

(1) See above p. 391.

Arabs would never know what really was going on in the field of atomic development in Israel, they might even suspect that Israel was producing nuclear weapons. This very fear, even when the bomb did not exist, would deter them from actually launching a war against Israel. The element of uncertainty would suffice to produce the same effect as that of proven atomic capability.

These elements were not formulated in so many words, but one can deduce them from pronouncements by some Rafi members and for that matter by members of other parties who adhered to the same position, or by political commentators close in their political opinions to some of the leading personalities of Rafi.

One of the real issues was therefore whether to increase the element of uncertainty involved in Israel's nuclear activities or rather to diminish it. In an important symposium published in 'Ot', the main disagreement between Eshkol on the one hand and Peres on the other hand was precisely the notion of uncertainty related to the atomic developments in Israel as far as Arab perceptions of these activities were concerned. Peres argued that by declaring that 'Israel will not be the first to introduce nuclear weapons into the Middle East', Israel really diminished the effects of the 'nuclear option as a deterrent'. His position was formulated in the following way: '... in a place where there are no peace agreements, each state should be allowed to cover itself with the shield she needs in order to diminish her vulnerability. This does not mean that I favour nuclear weapons, but I should like to

make it unambiguously clear that my position is that Israel should not free the Arabs from the suspicion they have. We do not have to make it easier for them - as far as their intentions are concerned - to attack us. To put it simply, as long as their aggressive policy is shrouded by clouds, we should not take away the clouds from our deterrence policy⁽¹⁾.

Opposition to Nuclear Armaments and Nuclear Options

The opposition in the political parties came from various quarters: two left wing parties, Mapam (Miphleget Hapoalim Hameuchedet - the United Workers Party) and Maki (Miphlaga Komunistit Israelit - the Israeli Communist Party); various political personalities in various parties, mainly the Independent Liberals and the Liberals (before the latter formed an alliance with the Herut Party) the main religious party, and an independent group of intellectuals which formed itself into a committee and was very active in starting a public debate on the issue.

The opposition of these groups to nuclear developments in Israel was motivated by various factors, from which one can distinguish four main themes. First, a moral apprehension at the possibility that Israel would become involved in nuclear development for military purposes. Second, a fear that nuclear weapons in the Middle East might bring about a situation which would cause great harm to

(1) See Ot, September 1966, p. 36.

Israel in strategic terms. Third, that the building of an option in Israel would harm the political relations between Israel and the big powers. Fourth, that reliance on such methods would both exacerbate the Arab-Israel conflict and would serve as another sign that Israel did not realise that the resolution of the conflict lay not in this or another strategic-military doctrine but in the realm of politics. The communist party (Maki) was also acting under the influence of the Soviet position. All these positions and motivations contributed to the creation of a long list of arguments against both Israel 'going nuclear' and also (but in fact to a lesser extent) against the building of a nuclear option.⁽¹⁾

In due course of time, the notion of MENFZ had been suggested and advanced persistently by many members of the above mentioned groups. This notion was designed partly in order to counter the following argument: What would happen to Israel if Egypt started producing nuclear weapons or received them from the outside. (Nobody thought seriously that any other Arab state could even start to consider the production of a bomb. The only remote possibility would have been that outside powers could have given nuclear weapons to the Arab countries but even then the first on the list would almost certainly be Egypt.) The proponents of this "scenario" argued that if Egypt went "nuclear" then Israel must also "go nuclear" but this in

(1) These are listed in a schematic form below in Appendix 2.

fact meant that Israel should first build an option, otherwise she might find herself one day completely "naked", and confronted by a nuclear Egypt. Furthermore, as no one can guarantee that an outside power would not one day sell or give in secrecy such a weapon to Egypt, Israel must be ready for such an extreme contingency as well. The only preparation to counter such a surprise acquisition by Egypt of a nuclear bomb, was the existence of such a weapon in the hands of Israel. Thus the idea of MENFZ was suggested as a solution to this scenario. But the proposal for MENFZ was intended also to pre-empt the creation of a situation in which both Israel and Egypt went nuclear. The notion here was that such a situation would be inherently unstable and dissimilar to the "balance of terror" between the two super powers.

Another reason for proposing MENFZ was that the notion of nuclear free zones in different parts of the world became more and more a recognized strategy in the field of nuclear arms control.

With Maki there had been the added motivation of the various Soviet proposals for turning the Middle East into a nuclear free zone. These proposals were at the beginning concerned only with the building of American missile bases in Turkey and later on with the Polaris submarines attached to the sixth fleet in the Mediterranean. Only later does it appear that the problems of a nuclear race among the local powers became the concern of the Russians

as well. It was in January 1958 that the Soviet Union proposed that the Middle East should become a nuclear free zone. The cause for this proposal was the planning and preparation for the establishment of nuclear missile bases in Turkey and possibly in the countries of other members of the Baghdad Pact (and later Cento). Maki proposed in the Knesset that the Soviet proposal should be debated. Mrs. Vilenska for Maki detailed the Soviet Proposal and called upon the Knesset to adopt it. It is obvious that what Mrs. Vilenska had in mind were the American moves to instal missiles in some Middle Eastern states. She also implied that there were 'circles' in Israel who would be ready to agree to the stationing of such missiles in Israel.⁽¹⁾ This Maki proposal was defeated.

Another Soviet proposal called for the creation of a nuclear free zone which would cover the whole of the Mediterranean basin. This proposal was dated 20.5.1969.⁽²⁾

The position of Mapam

Traditionally Mapam favoured a neutralist policy for Israel between East and West, a neutralism which at the beginning of the fifties had been coloured by a strong pro-Soviet tendency. This pro-Soviet orientation gave way later

(1) See Knesset, 19.2.1958.

(2) For text of the Israeli answer (dated 30.5.1963) to this proposal, see The Israeli Digest, Vol.VI, No. 13.

on to a 'pure' neutralist approach, a change which took place after the realisation among many Mapam members of the basically hostile attitude of the Soviet Union towards Israel. A split occurred in the party and a small group of extreme left-wingers under the leadership of Dr. Moshe Sneh left and formed their own party which eventually joined Maki. However, towards the beginning of the sixties and especially when the new Kennedy Administration moved towards a thaw in the Cold War, a new approach emerged. Mapam began to endorse a policy based on the assumption of a growing understanding between the two super powers. Neutralism gave way to a new policy based on a different configuration of the international system. In other words Mapam hoped for a growing détente between the super powers, a détente which would enable these powers to pursue joint and constructive policies as far as the Middle East and the Arab-Israel conflict were concerned. The idea was that the two super powers would either extend joint guarantees to Israel or to all the countries in the Middle East, or alternatively would guarantee the neutralisation of the Middle East. The notion of détente included such concepts as nuclear disarmament and the creation of nuclear free zones in various parts of the world. In this context it is interesting to note that Mapam leaders argued that the orientation on the "Paris-Bonn axis" which they opposed, would endanger Israel's relations not only with Russia but also with the United States.⁽¹⁾

(1) See for example, Barzilai, Knosset, 4.3.1963.

Within the context of the Arab-Israel conflict itself Mapam always favoured a moderate policy and endorsed a policy lending to some kind of a political settlement which would eventually resolve the conflict. At the same time it was aware of the security needs of Israel. One indication - among several - of this awareness was that many members of Mapam served in very high positions in the Army during the 1948 war and some continued to do that later on.

The opposition to nuclear developments in Israel, so far as Mapam was concerned, stemmed from all the causes indicated above (short of the effect of the Soviet policy to which only Maki adhered) and was also connected with their criticism of what became known as 'orientation on the "Paris-Bonn axis"' or the 'French orientation'. Thus general arguments against nuclear weapons were combined with criticism of a certain foreign policy.⁽¹⁾ Mapam leaders felt that the nuclear strategy pursued by Israel had inner and crucial connections with decisions about the direction taken by Israel's foreign policy. In this they were at the same time both right and wrong. They were right in the sense that some of the protagonists of the "nuclear option" were themselves identifying foreign policy choices with strategic choices, moreover they (these protagonists) argued in fact that foreign policy choices should be dictated by the needs of arms acquisitions. Mapam leaders

(1) See for example, Barzilai, Knesset, 4.3.1963.

were right on this issue in a different way as well, namely that the protagonists of a nuclear option were, or felt they were, close to France in the sense that the latter became one of the anti-status-quo powers in the international system in several respects and they assumed on this basis that France was not opposed to nuclear proliferation. However, Mapam and for that matter other groups using the same argumentation, were wrong in two senses: (a) Germany itself, apart from one faction of public opinion, felt strongly against nuclear proliferation in general including the case of Germany; and contrary to what Soviet propaganda had to say, was not (and is not) an anti-status-quo power in the general sense. (b) Although the position on nuclear proliferation is one of the important criteria for deciding whether a state is anti-status-quo or not, it is not the only one.

Because of the process of fragmentation in the international system the definition of what is a status quo power became very ambivalent. Powers act on several levels and differently in different areas, and this definition may change according to the level and area in which they act. France may be considered an anti-status-quo power on one level of her international activity and quite the opposite on a different level. Obviously this misperception of the opposition in Israel was shared by those who favoured an orientation towards France or a "French-German axis". Both sides had misperceptions about the new developments in Europe in the sense that they saw them in a one dimensional way.

The 'Europeans' in Israel hoped for the development of a new united Europe (something which might have happened and is still a possibility), which would act independently of the super powers and in which Israel could become part. This Europe would change the status quo in many ways, among which the problem of nuclear proliferation was one. They had however, overlooked the possibility that the new Europe could decide to pursue a negative policy towards Israel and could also adopt an anti proliferation posture once its position as a new big power became a fact in the international system.

Mapam's position evolved around several principles:

- (a) a critical view of the notion that there was a possibility of establishing a stable balance of deterrence based on nuclear weapons between Israel and the Arab countries.⁽¹⁾
- (b) Opposition to the foreign policy objectives or orientations entailed or connected with a strategy of nuclear deterrence.
- (c) The need for a political settlement for the Arab-Israel conflict, which would be hampered by the development of nuclear weapons in the Middle East.
- (d) The suspicion that the defence establishment in Israel would be used for attainment of political objectives by one political group inside Israel and that the position of this political group would be strengthened by the nuclear activities.

Thus domestic political issues were discussed within the

(1) The term 'balance of deterrence' had never been used by any party to the debate. The term usually used was 'balance of terror'.

framework of the debate.⁽¹⁾

Mapam, with several other elements opposing the atomic position of the government, demanded an Israeli political initiative to create the MENFZ. Mapam emphasised that this meant not the whole of the Middle East but only the 'Israel-Arab' region. In other words, Turkey and Iran were not included. In this Mapam took a very different position from Maki which insisted that the whole of the Middle East should be included in the area to be free from nuclear weapons.⁽²⁾ Evidently, by insistence on the Arab-Israeli region as the relevant geographical framework, Mapam wished to extricate the issue from the nuclear relations between the super powers, and not to put Israel in the awkward position in which she would have to take sides on the question of American nuclear missiles in Turkey, or the nuclear weapons of the Sixth Fleet when this fleet visited the eastern Mediterranean.⁽³⁾ The second point on which Mapam insisted was to leave open the question of 'who would inspect and verify'. Contrary to the official

(1) This particular point came to a head in the debate about the "Company for nuclear development". See, inter alia, Al-Hamishmar, April 1963.

(2) On these differences, see, inter alia, the debate in the Knesset, 17.3.1964.

(3) See the debate in the Knesset, 20.7.1964 when Mapam called for the establishment of the "Arab-Israeli region" a nuclear free zone, whereas Maki called for turning the whole of the Middle East into a nuclear free zone; see also Knesset, Knesset 5, session B, vol. 27, p. 1825.
The American nuclear missiles were withdrawn from Turkey already in 1963, a fact known to both Mapam and Maki; but this did not change the basic difference between their respective positions.

Israeli position which for a long time demanded mutual inspection as the only possible approach to control within any arms control agreement, Mapam suggested that powers which would be acceptable to the two sides, could serve as the control. Alternatively or even in the first place, the United Nations could serve the same purpose.⁽¹⁾ However, it accepted also the possibility of mutual control as an alternative, whereas Haki on the other hand always suggested international control (or inspection) as the only approach to the problems of control within the framework of MENFZ.⁽²⁾ Still a different version suggested by Mapam called for U.N. supervision that 'would be agreed upon by the two sides'.⁽³⁾

Obviously the most important difference on the question of 'who would supervise' existed between Mapam on the one hand and the official position on the other hand. Once Mapam suggested that the inspection need not necessarily be mutual, her position immediately became very different indeed from that of the government. Mapam's position stemmed from the assumption that it would be improbable that the Arabs, and in this context the most important power was Egypt, would ever agree to mutual inspection. Thus, apart from all the other stumbling

(1) See for example, Al-Hamishmar, 19.10.1962; Al-Hamishmar, 16.11.1962.

(2) See for example Barzilai and Sneh in Knesset, Knesset 5, session 2, vol. 27, p. 1825.

(3) See Knesset, 13.11.1962, Fifth Knesset, Session 2, Vol. 3, pp. 139-140.

blocks on the way to an agreement on 'denuclearisation' of the Arab-Israel region, a condition demanding "mutual inspection" would have made such a diplomatic initiative a complete non-starter.

The position of Maki

As has been noted on pp.140-2 the position of Maki was based on the same principles as those suggested by the other groups opposed to the government on the nuclear issue. However in the case of Maki the Soviet position played an important role.⁽¹⁾

Thus in contrast to Mapam Maki stuck to the notion of 'the Middle East as a nuclear free zone' in which clearly Turkey, Iran and the Eastern Mediterranean were included.⁽²⁾ The other basic difference between them and Mapam was concerned with the image they had of the atomic issue as part of the general foreign and defence policy of Israel. Whereas Mapam argued in favour of first a neutralist foreign policy and later a foreign policy based on close relations between Israel and both super powers within a framework of détente, and considered the nuclear policy of the government to be connected with a policy/^{of} anti-status-quo and anti-both super powers, Maki

(1) See p.143 and the debate in the Knesset, 17.3.1964.

(2) See above p.143 ; Knesset, 17.3.1964; Knesset 20.7.1964.

insisted - in the usual form of Soviet propaganda stance - that both the 'French' orientation and the 'American' orientation of the Israeli government were to be blamed in connection with the nuclear policy of the government. Maki did differentiate between these two orientations, but criticised both of them and did not admit that on the issue of nuclear proliferation there was a great difference between the position of America and the Soviet Union on the one hand and France on the other hand.⁽¹⁾ In passing, it may be noted that the difference between the super powers and France in the last analysis was not so enormous, as France gradually adopted an anti proliferation position, though did so only tacitly.

Maki tended on the whole to be much more vociferous and sharp in its criticism of the government's nuclear policy and argued that Israel was aiming at creating a power for the actual inducement of the Arab world to accept Israel's political objectives.

The Liberal Party

As in the case of Mapai and later on the "Alliance", it appears that there was no unanimity of approach among the Liberal party on nuclear policy. The party included people of different positions on foreign and defence policies and in fact these differences were played out along

(1) For the criticism of both orientations see for example Mikunis, Knesset, 4.3.1963, Fifth Knesset, Session 2, Vol. 19, p. 1348.

the full spectrum of opinions on foreign policy. The party was composed of two former parties: the former "Progressive Party", which could be classified as a moderate party on all issues of foreign policy; and the former "General Zionists" who were more of a centre-to-right liberal party of the European tradition. In 1965 the united party was dissolved and most of the former "Progressives" created a new party, The Independent Liberals; whereas the majority of the former Liberal Party created an alignment with the right wing Herut Party.

For some time there had been contacts between the Liberal party and Dr. Nahum Goldmann, the former chairman of the World Zionist Movement and at the time of writing still the President of the Jewish World Congress. Dr. Goldmann is known for his independent and indeed nonconformist position on problems of Israel's foreign policy. Partly due to his influence and partly due to the interest in foreign and defence policy shown by some other members of the Party, a debate on Israel's nuclear policy had been initiated in the Party's councils.

In the various debates in the Party, two schools of thought emerged: the first including, among others, people like S. Abramov M.P., P. Rosen M.P. (and also the president of the party), and M. Kol (later a minister in the Israeli Government) favoured the idea of an Israeli initiative to bring about MENFZ. Other leaders, among them Y. Harrari M.P., A. Rimalt M.P. and Y. Serlin M.P., opposed this idea.⁽¹⁾

(1) See Ha'aretz, 29.5.1962.

It is interesting that the Liberal party was the first party to bring the problem of Israel's nuclear policy to a formal debate in its central political organs. It seems that in the formal debate that ensued, the party endorsed the Government position. However, on one point there was unanimity of opinion between both schools of thought, namely, on the need for better and more efficient control over nuclear affairs in the country. This control was to be aimed at increasing the supervision of the Knesset over these activities, and also allowing members of the opposition, or of coalition parties not directly involved in the running of the defence affairs, to become party to the decision-making process in defence and foreign policy. By emphasising this last point, the Liberal party shared in the general feeling in the country during the last period of the Ben-Gurion regime that the defence and foreign policy of the country should be subject to public scrutiny and should cease to be 'a holy cow'. The wording of the Liberal Party resolution on this issue was the following: 'The Liberal Party favours the continuation of the efforts for the development and advancement of the nuclear research for peaceful uses in Israel, in all its aspects. At the same time the Liberal party demands the establishment of a small body with the participation of the opposition, which will follow - having full information - the developments, and will have full control over developments in the field of nuclear research both theoretical and applied, carried by each of the government agencies'.

'It is advisable that this body should be a sub-committee of the Knesset committee on foreign and defence policy. This body must be party to political decisions related to nuclear research and nuclear developments. The Liberal party also demands the reestablishment of the Atomic Energy Commission which will be composed of scientists and experts' (1).

A resolution calling for a halt to the building of the reactor in Dimona was defeated (2).

The Liberal party came back to the nuclear policy issue in 1963 within the general debate on foreign policy and defence policy which took place at the Party's conference. The two schools of thought mentioned above had not changed their positions. Rimalt who emerged as the main speaker for the second school, criticised the demand for an Israeli initiative for an agreement on MENFZ. He suggested that Israel should pursue two parallel courses of action: first, to increase its military capability 'in every way'; second, to try and secure guarantees from the big powers.

The other school of thought represented by Rosen, Kol and Zeev Katz agreed that Israel must increase its military capability but added that there must be an Israeli effort to secure that nuclear weapons would not be introduced into the 'region' (namely the Arab-Israeli area).

(1) See Haboker, 8.8.1962.

(2) ibid.

This arms control measure could be verified by international control and supervision. On this last point of the nature of the control there had been one variant: Rosen adhered to the notion of 'mutual inspection' whereas the others suggested international control. The debate ended with a defeat for the second approach⁽¹⁾. The official resolution of the party called for the strengthening of the deterrence posture of the Israeli army and for the establishment of a high powered defence committee nominated by the Knesset. The objective of this committee would be to strengthen civilian control over the defence establishment.⁽²⁾

The 'Public Committee for the Nuclear Disarmament of the Region'

Israeli nuclear activity and the complete lack of any serious public debate on the meaning and implications of this activity on the one hand and the dangers entailed in the possibility of the introduction of atomic weapons into the Middle East, prompted several people to initiate a public debate on these issues. Their objective was no doubt to propose an alternative to the government's policy in this field. The people concerned in this activity came mainly from the academic world and included among others, Professors Urbach, Sambutski, Natan, Leibovitz,

(1) See Ha'aretz, 17.5.1963 and 20.5.1962; Haboker 19.5.1963.

(2) See Haboker 21.5.1963; Ha'aretz 21.5.1963.

Stein and Bar-Hillel. Very active among them was also Mr. Eliezer Livneh a former leader in the Mapai party, who lost favour with his party because of several independent positions he had taken on economic and social issues. The late Professor Martin Buber lent his name to some of the pronouncements of the Committee.

The new committee organized several public meetings, published pamphlets and its members met various political leaders from all parties as a lobbying group.⁽¹⁾ Members of the group wrote articles in the press (notably among them Mr. Livneh) and initiated meetings with the central organs of the parties. Among other activities they sent a memorandum to the secretariat of Mapai stressing the dangers inherent in a nuclear arms race in the Middle East.⁽²⁾ The public activities of the group began with a statement published in Ha'aretz in April 1962 which ran as follows:

'We consider the development of nuclear weapons in this part of the world as constituting a danger to Israel and to the peace of the Middle East'.

'We call upon the Israeli public to act while there is still time against this terrible eventuality by joining in the following three demands:

(1) See for example Ha'ariv 5.7.1962; Al-Hamishmar 1.7.1962.

(2) See Ha'aretz 6.7.1962; Al-Hamishmar 6.7.1962 etc.

' (1) that the Middle East countries should refrain from military nuclear production, if possible by mutual agreement;

' (2) that the United Nations be requested to supervise the region in order to prevent military nuclear production;

' (3) that the countries of the Middle East avoid obtaining nuclear arms from any other countries'.

Apart from this proposal members of the Committee demanded that Israel should stop building the reactor in Dimona. (1)

The various arguments suggested by the Committee members resemble similar arguments used by members of Mapam, Maki (here there were the obvious differences concerning the adherence of Maki to some Soviet policies in this subject), and the Liberals. What distinguished this group from the other political groups, was its concentration on this subject, and the fact that it included people of all political colours. The fact that it included some of the outstanding academic personalities in the country also enhanced its prestige.

The Committee succeeded in starting a public debate on the issue and contributed in a limited way to an increased interest in the problem. However, for the reasons suggested above (2) the public response to its activity was

(1) See Davar, 12.10.1962. The paper quotes Mr. Livneh in a press conference.

(2) pp. 175-80.

rather limited. Israeli public opinion kept its conformist attitude about foreign and defence policy and was rather reluctant even to become engaged in such a debate. It was the activities of the parties like Mapam, and mainly Achdut Ha'avodah which brought about some change in the Israeli policy on the problems of the atomic policy.

Although the Committee criticized many aspects of the government policy on the atomic issue, it usually refrained from a debate on the basic foreign policy orientation of the government. Thus the complex of issues connecting the 'French Orientation' with the atomic policy of Israel did not become one of the points to which the Committee directed its attention (although members probably did this but not in their capacity as Committee members). Thus the Committee avoided becoming labelled with any particular political trend or orientation. However, committee members laid emphasis on what they perceived to be the super powers policy on nuclear proliferation. Like Mapam members and other critiques of the government position they maintained that both super powers had a common interest in halting proliferation and would eventually take active steps to frustrate proliferation. This argument was very central in the Committee's position in general, and strengthened their belief that an agreement on non-proliferation into the Middle East could be secured with the help of the super powers.

As has been indicated above, the Committee had some success in raising the issue of nuclear policy, but failed in securing wide public support for their point of view.

Whether they had contributed, with the other opposition parties involved in this debate to a change in the Eshkol government's position on arms control is not clear. Taking into consideration the strong reaction of government officials to the Committee's declarations and positions, it seems unlikely.

The Religious Parties

Traditionally, the religious parties in Israel were never primarily concerned with foreign and defence policies. The main party - the National Religious Party - had always been ready to accept whatever defence policy had been suggested by the current leadership of Mapai. The National Religious Party demanded as a quid pro quo for this acquiescence some concessions in the field of the relations between state and church. Traditionally the Mapai leadership under Ben Gurion felt that the partnership with this religious party was the most convenient one and thus concessions were given to the latter party in what interested her most. However, even within this framework of an unholy alliance, it was quite well known that the leader of the religious party Moshe Haim Shapira, was a moderate in foreign policy. It is not known however to what extent he voiced his own opinion in various matters pertaining to these issues.

Whereas Shapira usually adhered to the Mapai policy (whatever it may be under the leadership of the different groups), there were differences of opinion among other leaders of the party on foreign and defence policy. Thus

for example Mr. Raphael on the one hand could be considered as having 'tough' positions in these fields, whereas Mr. Moshe Una M.P. on the other hand has always voiced different and more moderate policies. Indeed it was on the atomic policy of the government that Una voiced some doubts which though formulated in very cautious terms still remind one of the Mapam position on these issues.

The Herut Party

The Herut Party is known for its extreme objectives in foreign policy. Being a continuation of the Irgun Tzvai Leumi, one of the three military organisations in the 'Yishuv'⁽¹⁾, Herut continued to adhere to the objective of 'reuniting' the whole of Eretz Israel (Palästine on both sides of the Jordan), within the state of Israel. Its leaders emphasised time and again the need to concentrate on defence and preparations for the eventual 'next round' with the Arab world. They have always been quick to point to the dangers constituted by various Arab moves and to maintain that Israel is lagging behind the Arab world in terms of the arms race. After the emergence of the doctrines of deterrence and especially after the news about the activities of German scientists in Egypt, Herut spokesmen began to insist increasingly on the need to develop new and forceful weapons in order to deter the Arab world from attacking Israel. Within this framework, Mr. Menachem

(1) 'Yishuv' is the Hebrew term for the Jewish Community in Palestine.

Begin, the leader of the Party, was in fact the only political leader in Israel who called openly for the creation of an independent nuclear deterrent for Israel.⁽¹⁾ Begin argued that in view of the declared policy of the Arabs about the destruction of Israel, and in view of the Egyptian preparation and experiments with chemical weapons carried by missiles, Israel would be justified in building her nuclear deterrent. Begin also argued that the Arab-Israeli conflict was unique because it was the only conflict in which one side was aiming at the complete annihilation of the other. This objective, according to him, did not exist in other conflicts such as the Indian-Pakistani one. Thus, he continued, the argument that Israel should not become engaged in the nuclear venture because it might induce other countries like India and Pakistan to 'go nuclear' was not relevant.

This general approach also affected the party line on some related issues. To begin with, party spokesmen and the party newspaper (Herut) criticised severely any concession by the government to American pressures in the nuclear field. There were demands that the government should not allow the visits of Americans to the Dimona reactor; there were hints that the American proposal for the building of the desalination project was linked with American control over Dimona and therefore should be seen in this context. The intention of this particular article

(1) See his article in The Jewish Herald, Johannesburg, 29.3.1966.

was obviously to suggest that Israel should abandon the desalination project and thus avoid American control.⁽¹⁾

Second, the party spokesmen in the Knesset kept criticising the idea of an Israeli initiative for the "denuclearisation" of the Middle East or of the Arab-Israeli region. Third, the notion of a deterrent power (though without saying it should necessarily be a nuclear one) kept appearing in Herut leaders' speeches.⁽²⁾

One of the dilemmas that a revisionist party like 'Herut' must face within the context of a debate on nuclear policy, is the relationship between nuclear weapons and foreign policy objectives. Nuclear weapons are the status quo weapons. Thus a party which demands the expansion of Israel to cover larger parts of Eretz Israel, must take into consideration that the existence of nuclear weapons in the region would be the greatest possible obstacle to such an expansion. This dilemma was somewhat modified by two qualifications: First, Herut leaders talked more about a nuclear deterrent force rather than in terms of a weapon system which should or could be used within the context of a future war of expansion. Second, Herut ceased at a certain point to demand an actual direct Israeli initiative for starting a future war for the expansion of Israel. However the dilemma was still there and it appears that no intellectual effort had been devoted to its resolution.

(1) See Herut, 13.2.1964.

(2) See for example, Haim Landau, Knesset, Knesset 6, Session 1, vol. 6, p. 280.

Indeed its very existence was not recognized. This only reflects on the general ignorance among several sections of the Israeli political elite and public opinion in general, about the nature of nuclear weapons and the various contexts within which they should be considered.

Another interesting reference to this could be found in a speech by Mr. Begin in which he argued that unconventional weapons in the hands of Egypt were very dangerous because no one could count on President Nasser to behave rationally. Begin continued by pointing to the difference in that respect between super-power relations on the one hand and those existing in the Arab-Israeli conflict on the other hand. In the latter case, he added, the Arab side could not act rationally and there was therefore a high probability of his using ^{un}conventional weapons. (1)

The logical conclusion from this kind of argument could of course have been that there was no hope of creating a stable balance of deterrence in the Middle East and therefore nuclear weapons could not be used as a rational weapon of deterrence, and hence there should be an effort to reach an arrangement by which nuclear weapons would not be introduced into the Middle East. However this conclusion was not suggested by Begin. In fact he could not have suggested it because apart from everything else this line of argument

(1) See Knesset, Fifth Knesset, Session 2, Vol. 33, p. 2163, 24.6.1963.

would have contradicted another which had been advanced by Herut leaders (and other political personalities as well), namely that there was no possibility of reaching any kind of agreement with the Arabs on arms control, and at the same time there was no possibility of trusting big powers' agreements on this question.

As far as guarantees were concerned, Herut leaders sometimes both argued in favour of concluding a military alliance with France and later on with America, and maintained that these guarantees were not credible. (They have drawn on other occasions a rather surprising and confused distinction between military alliances and guarantees, maintaining that the latter should not be sought after whereas the first are worthwhile and advantageous for Israel.)⁽¹⁾

(1) See for example Begin in Knesset, Fifth Knesset, Session 3, Vol. 1, p.10, 21.10.1963.

THE ARAB POSITION IN THE NUCLEAR FIELD⁽¹⁾

Arms races are usually the product of reciprocal anxieties of opponents about their actual or imagined intentions and capabilities. Sometimes, a certain regime in one state may start expanding its army for purely domestic reasons - prestige is one example. This on its part may start an arms race or contribute to the escalation of an arms race.⁽²⁾

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- (1) This chapter is limited in two senses: (a) It concentrates mainly on the Egyptian position in the nuclear field and the reaction of Egypt to nuclear developments in Israel; (b) it concentrates mainly on the following subjects: (1) various strategies that Egypt has developed as a reaction to Israeli moves in this field; (2) the extent to which Israeli developments have affected the basic Egyptian policy towards Israel; (3) the extent to which there was an interaction between Israeli nuclear developments and the war of 1967.

All these subjects are related to the question of the uses of nuclear options, namely, to what extent did the Israeli option affect Egyptian behaviour, and conversely to what extent there has been a game of mutual deterrence between Israel and Egypt on this subject.

The chapter is based only on part of the available sources. The sources used are: (a) a selected collection of articles from Egypt, Lebanon, and Syria up to the end of 1965; (b) all of Radio Cairo broadcasts on the nuclear issue since the end of 1965, which were monitored by the BBC monitoring service. These broadcasts always include the important weekly article written by Heikal in al-Ahram, which were usually considered to be semi-official representation of the Egyptian policy.

- (2) On motivations for the arms race in the Middle East, see inter alia Lewis Bloomfield and Amelia C. Leiss, 'Arms Transfer and Arms Control', in J.C. Hurewitz (ed.), Soviet American Competition in the Middle East, Praeger, New York, 1969. On the way in which embargoes and uncertainty about supplies of arms affect the arms race, see Y. Evron, 'French Arms Policy in the Middle East', The World Today, February 1970.

Most of the states in the Middle East participate in an arms race which started about fifteen years ago. In terms of quantities of arms, Egypt stands at the top of the scale in the Middle East, but several other powers in this region have also equipped themselves with highly sophisticated and abundant weapons. It has been Egypt which has been most concerned with whatever capabilities Israel has acquired or may acquire, and it was the Egyptian capability which created in the minds of Israeli decision-makers most of the anxieties which led to the ever increasing defence budget in Israel. The role of images, perceptions and misperceptions in this context is extremely important. As both Israel and Egypt are part of a multi-polar power system in the sub-system of the Middle East, the possibility of misperceptions is considerably increased. Egypt may have started an arms race because of inter-Arab competition, but this has led to increasing Israeli suspicions and as a result to the application of a certain policy aimed at increasing weapon levels in Israel. This on its part has led to another escalation of the arms race on the part of the Egyptians, and so on. For example, the famous Egyptian-Czechoslovak (which was in fact an Egyptian-Russian) Arms Deal of 1955 was motivated by the creation of the Baghdad Pact.⁽¹⁾ However, this arms deal was interpreted

(1) On the background to the 1955 Arms Deal, see Uri Ra'anan, Russia Arms the Third World, M.I.T. Press, 1969. Ra'anan argues persuasively that the real cause of the Arms Deal was the creation of the Baghdad Pact and the resulting convergence of Egyptian and Russian interests, and not the Israeli raid on Gaza on the night of 28.1.1955-1.3.1955. The Gaza raid was extremely important in another context, namely that of the Israeli-Egyptian conflict.

by the Israelis as being aimed almost exclusively against themselves. Indeed, this arms deal became another important step on the road which led eventually to the Sinai Campaign of 1956 and to the intensification of the Israeli-Egyptian conflict.

The Egyptian weapons' acquisition drive seems to have been motivated by four separate considerations. To begin with, there has been the Arab-Israel conflict which at various periods played roles of varying importance; second, there has been the inter-Arab competition for power. This competition even deteriorated at a certain point into a full scale war, namely the war in the Yemen in which Egyptian troops played a central role. Third, there has been the ambition of a military regime to prove its vitality by the acquisition of prestige weapons.⁽¹⁾ Fourth, there has been the idea that a process of rapid modernisation could be encouraged by the building of a modern army equipped with modern arms. This last point also entailed the decision to concentrate on the domestic production of weapons' systems. Another possible motive is the pressure of the army proper (which became the main and even sole constituency of the regime) on the new

(1) On the tendency of military 'Praetorian' regimes to acquire 'big' weapons for prestige objectives, see David C. Rapoport Praetorianism: Government without Consensus. Unpublished Ph.D. Dissertation, University of California (Berkeley) 1960.

On the special behaviour of the Arab military regimes within this context of "prestige through acquisition of weapons" see Windsor Philip 'Who Pays for the Arms Race?', The New Middle East, No. 1, October 1968.

military regime to acquire more and newer weapons.

The emphasis on a rapid development of the armed forces coupled with the modernisation of weapons characterised Egypt as early as the Muhammad Ali regime of the 19th Century. In Muhammad Ali's behaviour one can already detect some of the main characteristics of the Nasserite regime, and there is indeed an interesting continuity in the main features of both regimes. In both cases, the building up of an army and ambitious armaments' production programmes, apart from being a focus for tremendous energies and attention, became an element (and perhaps the most important one) in a process of assumed modernisation. Moreover, both regimes were intent on both a process of modernisation and on an ambitious foreign policy.

To a certain extent King Farouk - at a certain stage of his career - was also inclined to some of these aims, namely the accomplishment of ambitious targets in the field of foreign policy.⁽¹⁾

Some of the more ambitious programmes in the domestic production of weapons, programmes which had no relevance at all to the real capabilities of the country, were started in Egypt during King Farouk's regime. Indeed it was under him that an ambitious plan to build military aircraft was put into operation.⁽²⁾

(1) See on this Sylvia Haim (ed.), Arab Nationalism, University of California Press, Berkeley, 1962, especially pp. 48-51.

(2) See John H. Hoagland and John B. Teeple, 'Weapons Transfer and Regional Stability: The Middle Eastern Case', Orbis, Fall 1965.

However, it was only under the new revolutionary regime that Egypt plunged into more risky and ambitious military programmes. In doing this, the new regime completely overlooked the scientific and technological capabilities of the country. By trying to develop immediately highly sophisticated technologies the regime actually undermined the gradual sociological and ideological change which was necessary to bring about a valid and successful process of modernisation.

What the varied weapons' production programme did was, first, to increase the anxieties and suspicions of Israel and possibly some of the Arab countries; and second, to change the self-perception of the Egyptian regime as to Egypt's capabilities.⁽¹⁾

The Egyptian Weapons' Effort

Up to 1955, the Egyptian army was armed mainly with British weapons of various categories. This was the

(1) This is not to judge who actually started the arms race between Israel and Egypt. It simply notes the reactions in Israel to a particular aspect of the process of armaments in Egypt, namely the concentration on independent production of some weapons' systems. On the other hand, as will be shown below the nuclear development in Israel contributed to great anxieties in Egypt and probably brought about, or at least enhanced, the Egyptian effort in the field of missiles (although even here there is no clear and definite indication that this was the case). It might also have affected the Egyptian effort in some conventional weapons.

As to the general question of "who started the arms race" there is probably no definite answer, because both sides acted from the very beginning under a state of mutual suspicion, and also, as has been indicated above, in the Egyptian case, there were several motives for developing an arms race. Nadav Safran, for one, argues that up to 1955, Israel led in the arms race. After the 1956 war it was Egypt that took the lead in the race. See From War to War: The Arab-Israeli Confrontation 1948-1967, Pegasus, New York, 1969, pp 157 - 158.

inevitable consequence of the special place Britain had held in Egypt at the time and was also due to the fact that British officers and technicians trained the Egyptian army. The Arms Deal of 1955 changed all that and started a long process at the end of which the Egyptian army was completely armed by Soviet weapons.

'An examination of the Egyptian build up of military forces since 1955 particularly with regard to aircraft and missile systems, reveals two main phases of development which are probably characteristic of the effort by any developing nation to establish strategic capabilities. The first stage is the direct importing of weapons systems from a foreign power, together with the necessary training and logistical support. The second stage is the development of weapons systems under domestic control but using the technology provided by personnel, processes and material imported from abroad. In neither stage, as a general rule, can a developing nation proceed independently of foreign help...'(1)

The massive arms deliveries turned the Egyptian army into an extremely well equipped force. On 4th June, 1967 the Egyptian armed forces had at their disposal about 500 combat aircraft including Mig 21, 19, 17 and 15, IL 28 and TU 16, and about 1,200 tanks and SPG's.(2)

(1) 'Regional Stability and Weapons Transfer: The Middle Eastern Case', op. cit., pp. 715-716.

(2) The Military Balance, 1967, The Institute for Strategic Studies, London.

However, for several reasons Egypt plunged into the second stage of arms acquisitions, i.e. domestic production of planes and missiles.

On 25 July 1962, President Nasser officially opened the Helwan Air-Works near Cairo, which had been in pilot operation for several years. The new establishment concentrated on producing the HA-200 'Saeta' jet aircraft, and more important, the HA-300 super sonic fighter bomber. Initially the HA-300 was designed by Messerschmidt in the Hispano factory in Seville, Spain. The Spanish government decided in the late 1950's to terminate the project, and it was transferred en bloc to Helwan in Egypt. A team of German and Spanish workers continued working in Helwan.⁽¹⁾

It was reported that Messerschmidt was offered the directorship of the Egyptian aircraft industry but refused to take it, and the Austrian aeronautical engineer Ferdinand Brander became the head of the project.⁽²⁾ It is estimated that during the first half of the sixties a complement of 300-350 German aircraft engineers were employed at Helwan and India and Egypt agreed to co-operate in the development and production of the HA-300 and the Indian super sonic fighter HF-24.⁽³⁾

(1) See Hoagland and Teeple, op. cit.; Flight International, 26.3.1964; Aviation Week, March 16, 1964.

(2) See Hoagland and Teeple, op. cit.

(3) See Flight International, 26.3.1964.

Work on missile design started in Egypt as early as 1957, (though this early date is suggested only by one source), and German scientists were already more than involved with these programmes. But it was only in 1959-1960 that the missile production programme started on a really large scale. The work was conducted under the supervision of the German rocket designer Eugen Saenger, in collaboration with several other German specialists.(1)

Three types of missiles have been developed. The 'Al-Zafir' of 200 nautical miles range; 'Al-Kahir' of 325 nautical miles range; and a much larger one, 'Al-Ared' with a range of 510 nautical miles. The total number of missiles produced is not known. The main drawback in the missiles which were developed was their lack of a reliable guidance system. It seems that up to the Six Day War, at least, the Egyptians, or rather the German scientists, were unable to overcome difficulties in the development of a reliable guidance system for the missiles. It would appear from this description of the Egyptian missile effort that Egypt did not start research and development in this field as a response to Israeli activities in missile development. However, a different interpretation is suggested by several observers, namely that the missile development in Egypt started as a reaction to similar developments in Israel. On the 5th July, 1961 and during the

(1) See Hoagland and Teeple, op. cit.; other sources suggest later dates for the beginning of missile development and see below.

election campaign to the Sixth Knesset, Israel launched an experimental rocket called Shavit 2. The launching of this rocket prompted - according to these observers - the Egyptian drive in the same field.⁽¹⁾ The question which side started the 'missile race' is therefore still an open one. It has been reported that the Egyptians asked the U.S.A. for rockets similar to the Shavit 2, just a short period before the abovementioned launching took place. According to these reports, Egypt may have learnt about the imminent launching and wanted to secure a propaganda victory by launching them first, or at least not receiving a propaganda defeat by not launching them immediately after the Shavit launching.⁽²⁾ Eventually, the American government decided to supply the rockets.⁽³⁾

These press reports indicate either that Egypt had not, at the time, any missile research and development project underway, or that even if it had, it was still in its initial stages; hence the Egyptian attempt to secure some help from the U.S.A. in this field. It might also be that although some work on missiles had already started at the end of the fifties or at the beginning of the sixties, the real 'leap forward' occurred after the launching of the Shavit 2, either as a result of it, or as part of the plan decided upon before the said launching.⁽⁴⁾

(1) See mainly Safran, op. cit. pp. 155 -156.

(2) For the first point, see The New York Times, 6.7.1961; and for both points see The Times, 7.7.1961.

(3) See The Times, 8.7.1961.

(4) See below, p. 233 about the connection between missile development and nuclear activities.

In the early and middle 1960s there were persistent reports about Biological and Chemical research and development in Egypt, and information about these projects is also rather confused; but it seems that Egypt tried to pursue the possibilities of various Biological, Chemical and 'Radiological' weapons to be installed as warheads in missiles. Of particular interest were stories about the development of possible 'cobalt bombs'. These were described extensively during the trial of Otto Yuklik in Switzerland.⁽¹⁾ However, the attempt to describe these weapons as 'atomic warheads' was completely erroneous. There were also reports of extensive purchases of Strontium 90 and cobalt by Egypt, presumably for a use in these warheads.

In the world of the arms trade everything is possible, and indeed at a later date the Swiss paper "Weltwoche" reported that in fact Egypt was acting simply as a commercial agent for Communist China which needed Strontium 90 and cobalt badly and could not buy them directly in the open markets in the West. In any case the real purpose and scope of work conducted in Egypt in the field of radiological weapons remains unclear.

The Nuclear Effort in Egypt

From a very early stage the Nasser regime recognised the importance of science for both the general

(1) See for example reports in Ma'ariv, & Yediot Ahronot

development of the country and for the purpose of developing an independent capability for the production of arms. A Ministry of Science (the only one in the Middle East) was established with Dr. Saleh Hadit, as Minister. The Ministry supplies the administrative framework for scientific work being conducted in Egypt. The research work itself is being conducted in 'The National Centre for Research' whose director is Dr. Riad Turki, an institution established in 1950.

The first atomic reactor was built with Soviet aid, but part of the equipment was purchased in West Germany.⁽¹⁾ The reactor is a WWR-C Research Reactor, light water, 10% enriched uranium, 2 MWth, and became critical in 1961. It is insufficient for the production of material for nuclear weapons. It is situated in Inchass, the Eastern Delta.⁽²⁾

Egypt tried without much success to expand and develop further her capabilities in this field, and here one of the more important developments was the growing co-operation between Egypt and India. The Indian Atomic Energy Commission decided to extend full co-operation to its Egyptian counterpart.⁽³⁾

(1) On the capability of the reactor, see for example Ma'ariv, 22.8.1962; this reactor is mentioned in most of the published material discussing the atomic effort in Egypt.

(2) See William R. Van Cleave, 'The Impact of Technology on the Middle East', International Research and Technology, Nuclear Journal, Vol. I, No.2, February 1996, p.17.

(3) See The Jewish Observer, 1962.

But Egypt also tried to find ways to secure nuclear knowhow and technology from Western powers as well, though without great success. There have been different reports on these attempts. One instance was presumably the attempt to secure such help in 1963 from France when the attempt was made to buy a reactor for electricity production.⁽¹⁾ A high-ranking Egyptian scientific mission visited several American and European states with the intention of buying such a reactor, but failed. One of the reasons suggested was that the donor states demanded control over the plutonium produced in the reactor. The proposed reactor was of the natural uranium type moderated by heavy water, and having a capacity of 200 MWe.

A continuation of this effort, or possibly a new one was the proposed nuclear power and desalination plant which was planned to be built in Borg-al-Arab in the early seventies by Western Companies but the Egyptian Government was not able to raise the money.⁽²⁾

There have been unconfirmed reports of an Egyptian-Soviet agreement about the building of such a reactor⁽³⁾, but its clauses are not known and its very existence is not very clear.⁽⁴⁾

(1) See Uri Dan in Ma'ariv, 30.9.1963.

(2) See Van Cleave op. cit., p. 24.

(3) See Lamerchav, 13.3.1964.

(4) Thus Van Cleave op. cit. does not even mention it in his detailed description of the nuclear capabilities of Egypt.

A possible Egyptian-Chinese co-operation in the field of nuclear training has also been mentioned, presumably because of the lack of willingness on the part of the Soviet Union to extend nuclear aid without control.⁽¹⁾

The three main difficulties which Egypt faced and still faces as far as nuclear programmes are concerned (both for peaceful and military uses), are: (a) the lack of an adequate industrial and technological infrastructure; related to it is (b) the lack of an adequate scientific and technological knowledge which is predominantly the result of a lack of a high level and large scientific manpower; and (c) the tremendous financial costs involved.

The lack of a sufficient number of scientists and high level technicians is partly due to the whole state of higher education and scientific research in Egypt and

(1) See Andrew Wilson (OFNS), published in the Jerusalem Post, 4.6.1965; see also United States Atomic Energy Commission Division of International Affairs, Summary of Atomic Energy Programs Abroad, August 1965; Van Cleave op. cit. The last two sources suggest that Egyptian technicians were being trained in China in the nuclear field.

indeed in the whole Arab World. (1)

As for the financial costs involved, it appears that even before the 1967 war, the needs for the conventional army and for economic development were such that there were hardly any margins left. Indeed, insofar as investment in military layout was concerned, Egypt started to lose the race with Israel sometime in the sixties. (2) This limitation was certainly exacerbated by the extravagant and useless investment in the missile programme.

Arab Reactions to the Nuclear Developments in Israel

The disclosures by the international press about nuclear developments in Israel found coverage in the Arab press and received the attention of the Arab governments.

(1) A.B. Zahlan, 'Science in the Arab Middle East', Minerva, January 1970, describes the poor state of affairs in the field of scientific research in Egypt, although he points out that Egypt is much superior in this field, as in all the other fields of higher education, to the rest of the Arab world (Lebanon comes next with some potential). According to Zahlan only 20 scientists in the whole of Egypt and in the American University of Beirut, have successfully established research programmes. He goes on and says that in En Shams (the nuclear centre of Egypt) in which there is the largest concentration of scientific manpower in the Middle East (excluding Israel), there are altogether 12 Ph.D. level physicists, and the total number of scientists (including M.Sc. and above) in all fields (mostly applied ones) is 200.

(2) See Safran, op. cit. Chapters 4 & 5.

The initial Arab reaction was mixed. On the one hand there was a suspicion that in fact Israel is aiming at the building of a nuclear military capability. Israel's declarations about peaceful uses of nuclear energy⁽¹⁾ were disbelieved generally. On the other hand there was a suggestion that in fact Israel is spreading the news on purpose, namely that Israel was making propaganda points in order to frighten the Arabs.⁽²⁾ Commenting on the news, President Nasser even raised the possibility that the 'Imperialist Powers' were preparing the ground for arming Israel with atomic weapons while pretending that Israel had produced them by herself.⁽³⁾

The Arab anxiety about the news was evident in a statement by the Lebanese Premier on 20th December 1960. The Premier concluded that as long as Israel existed no Arab could live in Peace.⁽⁴⁾ And the Jordanian Prime Minister said on 27th December 1960 that he was certain that Arab countries would pay serious attention to the matter.⁽⁵⁾

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- (1) See for example The Times, 6.7.1961 which discussed the Arab reactions to the implications of the launching of the Shavit 2 and indicated that the Arabs were certain that this rocket was to be used for military purposes. It then pointed out that this reaction was similar to the Arab reaction to the news about the atomic development in Israel.
- (2) President Nasser in a speech in Port-Said on 23.12.1960 hinted that it was Israel which was spreading the news about her nuclear efforts, doing this in order to frighten Egypt. See Middle East Record, Vol. 1, p. 287.
- (3) Middle East Record, Vol. 1, p. 288.
- (4) Ibid, p. 288, quoting Radio Beirut, 20.12.1960.
- (5) Ibid, p. 288, quoting Radio Beirut, 27.12.1960.

Through the beginning of 1961 the Arab press continued to give prominence to the issue.⁽¹⁾

The first inter-Arab discussion on this new development was at the meeting of the Arab Foreign Ministers held in Baghdad in February, 1961 at which plans to counter the possible danger to the Arab position were discussed. The topic was only one among several others involved in the Arab-Israeli conflict, the others being the Jordan Water Project and Israeli activities in Africa.⁽²⁾ No clear indication was given of the position or policy adopted. It was just stated that the meeting had approved the plan which must be followed in this respect.⁽³⁾ It was also reported that the Arab representatives at the United Nations, were to urge the United Nations to entrust the International Atomic Agency with investigating the Israeli situation.⁽⁴⁾

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- (1) These are some of the representative arguments: The whole issue was mere propaganda, aimed at frightening the Arabs and inducing them to make peace with Israel (al-Ahali, Baghdad, January 1961; al-Bayan, Baghdad, January 1961; al-Mustaqbal, Baghdad, January 1961. See Middle East Record, Vol. 2, p. 223). Israel was incapable of manufacturing the bomb without the assistance of the Western powers (al-Gumhuriyah, 3.1.1961). The Arab states and especially UAR, Iraq and the Lebanon are also capable of manufacturing the bomb (al-Hayat, 30.12.1960, see Middle East Record, Vol. 2, p. 223). The Arab states should coordinate their efforts in order to prevent Israeli nuclear capability (al-Manar, 13.1.1961 ad-Difa, 15.1.1961, see Middle East Record, Vol. 2, p. 223). Heikal commented on the news on 27.1.1961. He referred to 'rumours' that Egypt might abandon her policy of positive neutralism as a reaction to the Israeli nuclear effort and said that this was improbable. Positive neutralism was a fundamental to Egypt. The answer to Israel's nuclear development lay in the strengthening of the Arab position (al-Ahram, 27.1.1961).
- (2) See La bourse Egyptienne, 5.2.1961.
- (3) See Middle East News Agency, 4.2.1961.
- (4) See Akhbar al-Yawm, 18.3.1961.

Since then the problem has remained on the Arab agenda. Thus the Secretariat of the Arab League called upon member-states to study the following problems as a preparation to the meeting of the Arab military consultative Committee: (a) The Palestinian problem; (b) the French aid to Israel in regard to the 'production of a nuclear bomb'.⁽¹⁾

However, this move and the deliberation in that meeting of the Arab chiefs of staff do not seem to show that the nuclear developments in Israel had already become uppermost in the minds of Arab decision-makers. Thus both the reports in the London Times and more significantly in La bourse Egyptienne relegated this topic (Israel nuclear development) to the end of the reports of the meeting. Even there the formulation was: 'French aid to Israel including equipment for building a nuclear reactor'.⁽²⁾ However, if indeed the Egyptian missile effort started as a result of the news about Dimona, then the Egyptians at least did react to this new move by Israel. La bourse Egyptienne of 21.5.1961 quoted extensively from an article published in 'The Red Star' which discussed Israel plans 'for nuclear arms'.

(1) See La bourse Egyptienne, 18.4.1961.

(2) See The Times, 24.4.1961; about the meeting see also La bourse Egyptienne, 24.4.1961.

The Launching of Shavit, Arab reactions to it, and Egyptian self-images of the Egyptian missile Development

Arab reactions to the launching of Shavit 2, an Israeli experimental missile, in July, 1961, somewhat resembled previous reactions to the news about the nuclear effort in Israel. On the one hand suspicion and anxiety, while on the other a suggestion that the new missile has no real significance. Egyptian accounts tended to emphasise more the second approach whereas the Lebanese and Jordanian comment expressed concern. Thus authoritative Egyptian sources were quoted as stating that they had not been surprised by the launching which had only a propaganda value. (1)

One Western observer comment was that there are indications that the Arabs might ask the Soviet Union for nuclear bombs if Israel began production. (2)

(1) al-Masa, 7.7.1961, see Middle East Record, Vol.2, p.224; and Heikal wrote that Shavit 2 was in fact a French rocket about which Israel had spread lies and which scared no one. (al-Ahram, 12.7.1961, see Middle East Record, Vol.2, p.224). Bahjat al-Talhuni the Jordanian Prime Minister, on the other hand, stated that he saw in the rocket 'a new threat to the Arabs in the form of an alleged scientific achievement' and he appealed to the Arabs to protect themselves by solidarity. (Radio Amman, 6.7.1961, see Middle East Record, Vol.2, p.224). Similarly the Lebanese press deplored Arab disunity and lack of purpose in face of Israel's efforts and exhorted them to change their ways. (al-Hayat, an-Nahar, al-Kifah, Beirut al-Masa, 6.7.1961, see Middle East Record, Vol.2, p.224).

(2) See The Times, 6.7.1961.

In Egypt, as in Israel, the question of nuclear weapons became interwoven - at least in the public debate - with development in the field of missiles. A great upsurge of self-congratulation accompanied the first launchings of the Egyptian missiles. Apart from pointing out the scientific achievement of the Egyptian producers, there were suggestions about the renewal of the heritage of Pharaonic Egypt and also that Egypt was entering the space era.⁽¹⁾

But perhaps more relevant to the nuclear issue is the notion suggested by several sources that the decision to start developing the missiles was taken by President Nasser when he heard about the building of the nuclear reactor in Israel.⁽²⁾ The Arab press and declarations connected the missiles with the general scientific and military posture of Egypt in general and her position in the conflict with Israel in particular.⁽³⁾ What is perhaps interesting to note in this context is the 'totalistic' character attributed to missiles. For instance the Lebanese pro-Nasserite newspaper Kul Shai said while discussing the missiles that what was important for the Arabs was that they would have a power 'which will be able to annihilate Israel when the time comes'. It may be that

(1) See al-Akhbar, 22.7.1962 and Cairo Radio 21.7.1962.

(2) See, Said Fariha, a Lebanese journalist who quoted Heikal on this, and Heikal in al-Ahram, 20.7.1962.

(3) See al-Gumhuriyah, 29.7.1962, and 24.7.1962; the military correspondent of Akhbar al-Yawm 28.7.1962; Sawt al-Arab, 21.7.1962.

this kind of attribution created among both Israelis and Arabs, but specially among the latter, the association of the nuclear bomb with missiles in general. This association came of course on top of the general observation that the Super Powers and other nuclear powers tended to concentrate on missiles as the main delivery system for nuclear weapons. Whereas in Israel one school of thought among those who advocated 'going nuclear' hoped that by its (the nuclear bomb's) totalistic character one could hope to secure a permanent settlement with the Arab world, those in the Arab world who wished to reach a total 'solution' to the Palestine problem also tended to attribute to the weapon system closest to the nuclear bomb, i.e. missiles, the same total characteristics. There is also another aspect which connects missiles and atomic bombs, namely, the scientific achievement concerned in the development of both these products. For example there is the unsophisticated argument that a power which can produce missiles can also produce nuclear bombs. Thus the weekly 'Al-Huadat' (Lebanon) wrote on 3.8. 1962 that the Egyptian missiles had turned the balance of power in the Middle East against Israel, and it continued: 'Egypt will soon surprise the world when it will announce an achievement in the field of nuclear research for both scientific and military uses...'

The development of missiles on the Egyptian side therefore created a whole series of misperceptions (partly shared by the Israelis) about the nature of missiles as independent weapons and not just as delivery systems, and also showed that this kind of weapon's development affected public attitudes towards other problems such as the

technological and scientific capabilities of Egypt.

Arab Reactions during the years 1964-1965

Arab concern with nuclear activities in Israel continued in the years 1964 and 1965. One Arab reaction gave the priority to the general strategic conventional posture and discounted Israel's potential nuclear threat. This position was possibly due to three factors: (a) the direct concern with the Jordan Water Project and the possibility of escalation into war in the near future, in which case the war should be conventional; (b) the Jordan project seemed, in the long term, to be a greater threat to the Arabs, in the sense that it would 'double Israel's capabilities' (according to various Arab sources), than the atomic effort; (c) the nature and capabilities of either nuclear weapons or nuclear options were not realised (following the Arab assumption that indeed Israel was, in fact, aiming at building a nuclear bomb).⁽¹⁾ An example was the article by Ahmed al-Kaldi which was devoted to a detailed analysis of the military balance of power between Israel and the Arab countries in which the possibility of Israel nuclear bombs was not even mentioned, although the reason may have been that the author was discussing capabilities in 1964 and not future ones.⁽²⁾

(1) See for example article by Colonel Hitan al-Kilani, in al-Ushu al-Arabi, Lebanon, 9.3.1964.

(2) See al-Moharrer, Lebanon, 22.6.1964.

Even the second Arab summit played down the Israeli nuclear development. The meeting discussed three subjects: (a) the military situation - a report by the general commander Ali Amer; (b) the diversion of the Jordan waters; (c) the Palestinian identity (or existence).⁽¹⁾ It seems that the main concern of the participants in this meeting (apart from intra-Arab conflicts and competition), was the diversion of the Jordan waters and the possibility of a clash as a result of it. The report on the military situation again did not contain any reference to nuclear developments in Israel.⁽²⁾

A slightly different approach however, was indicated by Walid al-Khalidi, who, in discussing five aspects of the Arab-Israeli conflict agreed that Israel would be able to produce an atomic bomb in 1968.⁽³⁾

The approach certainly changed towards the end of 1965 when Heikal wrote a long article on the possibility that Israel might produce nuclear bombs and suggested an Egyptian strategy to counter this development. Following this article, Ahmed Khalifa wrote a long article in al-Huria Lebanon,⁽⁴⁾ about the need for a preventive war against Israel, in order to destroy the nuclear reactor in Dimona, thus paralysing Israel's capability to produce nuclear weapons.

(1) See al-Hayat, Lebanon, 10.9.1964.

(2) See Akhbar al-Yawm, Egypt, 12.9.1964.

(3) See al-Usbu al-Arabi 25.5.1964; a lecture given by al-Halidi in the 'Arab Cultural Club' in Beirut and published subsequently in al-Usbu al-Arabi.

(4) 20.10.1965.

Khaliifa writes that atomic weapons in the hands of Israel constitute two major dangers to the Arab world: (a) new Israeli aggression against the Arabs with the objective of territorial expansion under the umbrella of nuclear weapons; (b) the indefinite continuation of the Jewish "robbery in Palestine". Israeli nuclear capabilities would paralyse Arab capabilities to regain Palestine. Once Israel obtained nuclear weapons (which, added Khaliifa, according to experts would take about 3-8 years) she would immediately try to use it for expansion, the probable targets being the West Bank, the Gaza strip and the Jordan river sources. As Israel was on the verge of equipping itself with nuclear weapons, the only Arab answer could be a preventive war. This new strategy, continued, Khaliifa, was based on the assumption that a war would break out within the following three to five years and also that time, contrary to the assumption of the revolutionary Arab regimes, was not working on the side of the Arabs. In such a future war the cornerstone of Arab power would be the Egyptian army. The role of the Palestinians in this future war would be to create a political unit; to help the other Arab armies militarily and mainly (in the military field) to pursue military activities of the Fedayeen kind.

The need for a preventive war in order to forestall the possibility of an Israeli bomb, was developed with great clarity and persuasiveness in Saleh Shabal's lecture in 'The Arab Cultural Club' in Beirut, on 4.11.1965. This was the culmination of several references in the Egyptian and

Lebanese pro-Egyptian press to the problem of 'Israel and the Bomb'.⁽¹⁾ Shabal argued that Israel had fulfilled all the six basic conditions which were the prerequisites for producing the nuclear bomb, and that the secrecy under which she was carrying out her nuclear activities, her readiness to produce heavy water alone and manufacture natural uranium, for a price ten times dearer than that of the international markets, all this led to the conclusion that her atomic activity meant preparation for war.

At least some Arab commentators envisaged a certain link between the conventional arms race in which Israel was engaged and the atom bomb. Thus Salah Shabal⁽²⁾ argued that there were three possible reasons for the Israel-German arms deal and subsequent Israeli arms deals (such as the acquisition of 200 Patton tanks from the U.S. after the cancellation of the Israeli-German arms deal): (a) to create a deterrent against any possible Arab preventive war aimed at destroying the atomic installations in Dimona; (b) to enable Israel to attack first in order to forestall an Arab preventive war, namely a preventive war to prevent a war; (c) to permit Israel to occupy part of the Arab lands, the best time for which would immediately be prior to acquisition of the bomb; Israel would occupy territories and announce immediately afterwards that it had the bomb.

(1) See al-Anwar, Lebanon, 6.11.1965, and al-Hayat, Lebanon, 13.11.1965.

(2) See al-Anwar, 15.2.1966.

This it would succeed in 'freezing' the situation. This would also happen if the Arabs succeeded in the meantime in producing atomic weapons, because then 'a balance of terror' would be created, which would freeze the new status quo.

Schools of Thought and Positions taken by the Arabs in regard to a possible Israeli Nuclear Bomb (1)

The debate on the possibility that Israel might produce a nuclear bomb became - as explained above - more intensive towards the middle of the sixties. The debate was at one and the same time concerned with the problem of the general future of the Arab-Israeli conflict and also with the question of the best strategies for the various Arab objectives within the context of the conflict. Inevitably the various positions reflected differences between the different states and also between the emerging Fatah and other Palestinian groupings on the one hand and the established Arab regimes, and in particular Egypt, on the other.

These various positions themselves passed through several stages.

One possible categorisation of Arab attitudes was suggested by one of the main verbal protagonists, Saleh Shabal. (2) According to Shabal, there were five basic Arab approaches to the problem:

(1) The Egyptian position will be discussed in greater detail below.

(2) See his lecture as published in al-Anwar, 6.11.1965 with additions in al-Hyāt, 13.11.1965.

(a) Those who maintained that nuclear weapons cannot in fact be used during war, proof of which was found in the fact that the nuclear powers have not used this weapon since the bombing of Hiroshima and Nagasaki. The purpose of Israel in acquiring nuclear weapons was in fact not to use them, but only to frighten the Arabs.

(b) Those who assumed that the numerical superiority of the Arabs was such that it would balance an Israeli nuclear bomb.

(c) Those who believed that if Israel acquired nuclear bombs, the Arabs would get them as well, thus negating the effect of the Israeli bomb, so that war would still be conducted along conventional lines.

(d) Those who maintained that the campaign to 'liberate' Palestine was basically of a 'Fedayeen' type, hence nuclear weapons were irrelevant.

(e) Those who assumed that the effort to keep nuclear weapons excluded from the Middle East would succeed and the major powers would enforce their will on Middle East, so that neither Israel nor the Arabs would be able to acquire these weapons.

Other approaches and variations on the above-mentioned categories have been suggested by various other Arab writers:

If Israel acquires nuclear weapons she will try to use them in order to continue territorial expansion. If both sides acquire nuclear weapons there will be a

'balance of terror' and the Arabs will lose their ability to 'liberate' Palestine. In any case, Israel has got the potential to produce nuclear weapons.⁽¹⁾

Nuclear weapons are neither a deterrent nor a weapon for causing fear. The future war with Israel will be conducted by conventional weapons because nuclear weapons cannot be used in direct military confrontation.⁽²⁾

The Israeli nuclear potential carries with it extremely grave dangers for the Arab world. At worst only Israel will produce the bomb - and that will be within a period of three years⁽³⁾ - and will not hesitate to use it if necessary in a situation when her survival is threatened. Arab-Israeli relations are very different from the relations between the major powers where there exists an understanding that wars should remain limited and should be conducted outside the territory of both sides and without danger of real defeat to either. At the same time the argument that the conventional resources at the disposal of the Arabs can outbalance the bomb is not valid. Lastly, an Arab bomb will only help to stabilise the present situation via the mechanism of the balance of power. In time of war it might not stop Israel from trying to use the bomb. One cannot count on the major powers either to bring about "denuclearisation" of the Middle East or to give guarantees to the Arabs

(1) Walid al-Khaleel, al-Ushua al-Arabi, Lebanon, 25.5.1964.

(2) The Hebrew commentator, Radio Cairo, 21.6.1964.

(3) Written in 1965.

against an Israeli nuclear threat. Both these approaches will entail acceptance of the status quo, which is unacceptable to the Arabs. Palestinian 'fedayeen' action is important, but cannot by itself bring about the "solution" of the Palestine problem, therefore the only practical approach will be to start a preventive war.⁽¹⁾

In general, one can distinguish between several basic Arab approaches. The first one, which eventually became the approach of the Syrian Baathist government, maintained that the "Palestinian Problem" could be "solved" by guerilla action developing into a "national liberation war", and that nuclear bombs could not be effective against such operations. The operational implications of this approach could be twofold: on the one hand an increase of fedayeen action, but at the same time postponement of a full scale war.⁽²⁾ Furthermore it raised the possibility of a prolonged conflict without any need for quick action. Ostensibly the Fatah approach was similar to the Syrian one, namely that nuclear weapons were ineffective against guerilla action and that the right strategy for the 'liberation' of Palestine was a protracted guerilla campaign against Israel. It appears however that the Syrians used the slogan of "national liberation war", and gave backing to the Fatah primarily as instruments in their competition with other Arab regimes.

(1) Shabal, op. cit.

(2) At the same time the Syrian pressed, on the declaratory level, for immediate war against Israel.

The Fatah approach⁽¹⁾ suffered from an acute dilemma. On the one hand, Fatah believed and hoped that guerilla action would lead to the 'liberation' of Palestine; but on the other hand, they hoped that their activity would lead to an open war between Israel and the conventional armies of the Arab world. In other words, at a certain level they considered their actions as simply the catalyst of a process by which only the combined conventional power of the Arab world would be able to 'solve' the Palestine question in the way they wanted. If that indeed was their approach, they had to consider the problem of nuclear weapons as an instrument against conventional forces and not only guerilla forces. The same dilemma, but on a different level, kept haunting Fatah from the 1967 war onwards, namely whether by 'pure' guerilla activity there is any possibility of defeating Israel or whether there is a need for direct conventional confrontation. (Even according to Maoist doctrine and General Giap's approach, the 'third stage' of guerilla war turns into a conventional war when the erstwhile guerilla forces become conventional and openly attack the weakened forces of the enemy which by that time will be confined to the 'cities'). The question of nuclear weapons will have to be raised at that third stage. The dilemma remains, and there appears to be no answer to it.

(1) On Fatah, general strategy and their dilemmas see Y. Harkabi, Fedayeen Action and Arab Strategy, Adelphi Paper No. 53, Institute for Strategic Studies, London, 1968.

The second approach argued that an Israeli bomb was a dangerous development for the Arab world and would change the balance of power in the Middle East. This approach had been advanced mainly by Egypt, for the obvious reason that this country would be the first to face an atomic threat from Israel. Thus, Heikal⁽¹⁾ discussed the various possibilities open to Egypt, which he defined as follows: (a) to wait until Israel obtained nuclear weapons, and then to act as seemed best at the time; (b) to enter into a scientific race which might in the end lead to a nuclear balance but which would postpone the hope of the Arab nation to "solve" the Palestine problem for an unlimited period; (c) to trust in international political action despite the fact that the world always tends to accept any existing situation as preferable to alternatives, even if injustice is caused; (d) to act in a preventive way before the crucial moment. Elaborating on this last possibility, Heikal argued that preventive action would be possible only after the fulfilment of certain preconditions, such as the strengthening of both Egypt and the other Arab countries. He insisted that action should come before Israel acquired superiority. He also argued that Egypt should develop the capability to absorb a first strike (he did not elaborate on whether this meant a nuclear or a conventional strike), and to answer in kind.

This kind of argument obviously leaves the way open to every kind of policy or strategy. One of the options is

(1) See al-Ahram, 15.10.1965.

to build a competitive nuclear capability, and then either to launch a surprise attack or to adopt a 'balance of terror' policy. Another option is to launch a surprise preventive attack immediately and thus eliminate the possibility of Israel becoming a nuclear power.⁽¹⁾

This basic approach, which stressed the dangers entailed by an Israeli atomic bomb - from the point of view of the Arabs - could of course have led to a different conclusion, namely that the Arabs should concur in some sort of negotiations on arms control in the Middle East or even negotiations leading to the settlement of the Arab-Israeli conflict, or perhaps still to a tacit acceptance of the status quo for an unlimited period. None of these policies was suggested by the main Arab states. But one Arab state at least argued (possibly within the context of internal Arab competition) that another Arab state had in fact adopted such a policy. Thus Syria argued that this kind of an acceptance of the status quo was what Egypt was really seeking.⁽²⁾

Clearly the various Arab positions reflected several political and ideological factors at the same time. To begin with, the various positions and strategies suggested were used as arguments within the context of the internal Arab competition for political power and influence. Second, each position represented the power position of the

(1) On the need for a preventive strike aimed at the Israeli nuclear installations see al-Garida, Lebanon, 22.2.1966.

(2) See an editorial leader in al-Ba'ath, Syria, 28.11.1965.

state advocating it relative to the power position of Israel. Third, they indicated the differences in the intensity of hostility towards Israel. Fourth and last, the positions were also affected by the ideological context within which each regime (or guerilla movement) acted.

The Egyptian position

Egypt was and still is the most important military power in the Arab world and the one most likely to be affected by an Israeli nuclear weapons programme. So far as the military aspects of the Arab-Israeli conflict are concerned, the two main opponents are Israel and Egypt. The particular Israeli-Egyptian conflict started in 1948 with the Egyptian invasion of Palestine and it has continued to develop since then. This is not the place to elaborate upon the various stages of this particular conflict, and both sides give different starting points for the beginning of the escalation of the conflict between them. It is clear, however, that from 1955 onwards (because of the cumulative effects of mutual anxieties about the objectives of both sides; the Gaza raid of 28.2.1955; the Fedayeen activities and the arms race), the two sides came to consider their strategic and military relations as the overriding consideration in their general military strategy.⁽¹⁾ This attitude was strengthened by

(1) Israel has to take into her military considerations the threat posed by the other Arab countries whereas Egypt since 1956 has to take into consideration other problems such as inter-Arab competition and a possible threat to the big powers (objectively more imaginary than real, but real enough in the eyes of the Egyptian leadership). However, even while taking into account these other problems, it appears that for both Israel and Egypt, their mutual military relations were still the prime concern.

the Sinai campaign of 1956. The commitment of President Nasser to a war against Israel became more important in the overall foreign policy of Egypt and interacted increasingly with the notion of an 'integral Arab unity' under Egyptian hegemony. (1)

Mutual suspicions and anxieties between Israel and Egypt led on both sides to the development of an arms race and the unfolding of mutually opposed strategies. Thus every new step by one side in research and development which could lead to a new breakthrough in the balance of military power caused considerable anxiety to the other side. It is not surprising therefore that the Arab state most affected by the news about Israeli nuclear activity was Egypt.

Whether Egypt under President Nasser was really planning a military campaign against Israel as a short range foreign policy objective or only as a long-range objective - a question of great importance - is not clear. (2) What does seem to be clear however is that at a certain stage President Nasser adopted a very cautious stand in the

(1) On this last point see for example Safran 'From War to War', op. cit., chapter 2; I. William Zartmen 'Military Elements in Regional Stability', in J.C. Hurewitz (ed.), Soviet-American Rivalry in the Middle East, op. cit.

(2) A definite answer to this question requires a separate and extensive study. It is my personal contention that he planned it as a long range objective, and that he possibly was ready at certain stages to come to some sort of political accommodation with Israel provided some political pre-requisites were met.

Arab-Israeli conflict. This presumably was the result of his realisation that the balance of military power did not favour him. At various stages he argued that war against Israel could and should be launched only when three conditions were fulfilled. These were that a meaningful Arab unity should have been achieved; that Israel should be isolated from International Society; and that the military balance between Israel and the Arabs should have changed.⁽¹⁾ It may be that the first and third of these conditions were posed precisely because the unlikelihood of their achievement would save Egypt from the necessity of taking any action; or that the first condition, at least, represented an independent Egyptian objective, mentioned in this context in order to justify Egyptian claims to hegemony in the Arab world. Probably the answer is affirmative, yet at the same time the option for an attack on Israel was kept open. In any case, the possible introduction of a major new weapon system which could tip the balance of military power in Israel's favour for a long time, posed several serious dilemmas for Egypt.

To begin with, to the extent that a war against Israel was a short range objective, a change in the military balance would have postponed any successful war against Israel for an unlimited period. Second, it would put Egypt in the impossible situation by which the last condition

(1) See Heikal in al-Ahram, 25 September, 1964.

of President Nasser would be proved completely unrealistic and thus, within the context of internal Arab politics, Egypt would have either to renounce this condition or else admit that it was ready to renounce the objective of a future war against Israel. Third, one of the Arab misperceptions was the 'expansionist' character of Israel. The fear that Israel might launch a surprise attack against Egypt or against another Arab country - in which case Egypt would find itself compelled to intervene - persisted in Egypt and in the other Arab states. This last possibility, and also the fear of a war rising out of some process of escalation, certainly demanded some reaction to the nuclear development in Israel.⁽¹⁾ Another problem posed by the Israeli nuclear development was the prestige issue. Two of the main declared objectives of the Egyptian military regime were the war against Israel and the building of a strong and capable military machine superior to the Israeli one. For such a regime to admit inferiority in the development of any weapons' system, could have meant the loss of considerable prestige both domestically and in the other Arab countries. This last point indeed was a contributory factor to the great enthusiasm with which the missile's' development in Egypt was welcomed.⁽²⁾

These dilemmas and the anxieties raised by the news of Israeli nuclear developments forced the Egyptian leader-

(1) On the Israeli 'expansionist' policy within the context of discussion on nuclear weapons, see for example Meikal in al-Ahram, 20.8.1965, broadcasted by Cairo Radio, BBC monitoring service ME/1943, 23.8.1965.

(2) On this point see above in pp. 243

ship to pursue several alternative policies: (a) An attempt to build an independent nuclear production capability; (b) An attempt to build up a missile capability which could perhaps act as balancer. (The complicated Egyptian reactions and attitudes about missile development have been indicated above)⁽¹⁾. (c) The continuation of the conventional arms race, in order to build up a conventional superiority. The notion that conventional superiority may still have great importance even after the introduction of nuclear weapons, had been suggested by Heikal,⁽²⁾ when he discussed the possibilities of surprise attacks just before or even after the introduction of nuclear weapons. Although ostensibly this discussion was concentrated partly around the concept of a preventive or pre-emptive war, the emphasis on the role of conventional weapons and primarily missiles and fast aircraft was clear.⁽³⁾ (d) To try to secure some kind of nuclear aid from the Soviet Union, and failing that from other countries. (e) To try and secure guarantees from the Soviet Union against a possible threat by a presumed Israeli bomb. (f) To try to deter Israel from actually "going nuclear". This presumably could be secured in one of three ways. It could be achieved by a threat that Egypt would launch a surprise preventive attack against Israel if

(1) See pp.233-5 ; On the notion that Nasser decided on the missile project after learning about the development in Dimona see p.233.

(2) al-Ahram, 20.8.1965.

(3) And see below in the discussion of the notion of preventive war, and the military doctrine of the Egyptian army.

the latter reached the threshold of nuclear capability. An alternative was diplomatic activity aimed at securing super-powers' pressure on Israel to desist from actually passing this threshold. Or there remained the possibility of a threat that Egypt herself would produce nuclear bombs if Israel 'went nuclear'. (g) general diplomatic activity aimed at the creation of 'a nuclear free zone in the Middle East' but under Egyptian conditions and for as long as it suited the interests of Egypt.

Egypt's activity in the field of missile and nuclear development has been indicated above. The conventional option was of course partly a continuation of the arms race in conventional weapons which had been going on between Israel and Egypt for some time. In the particular debate on nuclear weapons, this option was usually mentioned in connection with the notion of a preventive strike against Israel.

The Problem of preventive war

The notion of a preventive strike was raised several times by Egyptian commentators.⁽¹⁾ It was mentioned (although in a not very explicit way) by Heikal in his article in al-Aharam of the 20 August 1965. Later on, and after the Casablanca summit meeting of the Arab leaders (September,

(1) See pp. 236-8 and also see President Nasser's speech in Port-Said on 23 December 1960 when he said that if the U.A.R. became certain that Israel was making an atom bomb, it would mean the beginning of war, because the U.A.R. could not permit Israel to manufacture an atom bomb. She would have to attack the base of aggression. See Middle East Record, Vol. I, p. 287.

1965), the notion of a preventive war was continuously adverted to. It was mentioned as an option to counter the possible Israeli bomb, by Heikal in al-Ahram, on the 15 October 1965. President Nasser seized on the problem when he declared, on the 18 February, 1966 in a press conference with Iraqi newspaper editors: 'If Israel produces the atom bomb, then I believe that the only answer to such an action would be preventive war.'⁽¹⁾ (Arabic: harb wiqaiyah.) The Arab states will have to take immediate action and liquidate everything that would enable Israel to produce the atom bomb.⁽²⁾ The same threat was repeated by President Nasser in his speech in Cairo on 22 February, 1966.⁽³⁾

At what stage would this preventive war be launched? Would it be launched just before Israel acquired its nuclear weapon capability or immediately after that stage had been reached? There are different answers to this question. Thus, for instance, al-Ahram in an article quoted in Radio Cairo on 19 March 1966 wrote, in general terms, that if Israel developed nuclear weapons the only answer by Egypt could be a preventive war.⁽⁴⁾ From this wording one may draw the conclusion that the war would be launched after the development of a nuclear bomb. However, a political

(1) Broadcasted by Baghdad Radio on 20.2.1966, see BBC monitoring service 22.2.1966.

(2) ibid.

(3) See BBC monitoring service, ME/2096, 24.2.1966.

(4) See BBC monitoring service, ME/2140.

commentator on Radio Cairo pointed out on 9.9.1966 that an Egyptian answer to an Israeli nuclear programme would be a preventive war against Israel launched by Egypt and the other Arab countries 'before Israel is capable of producing nuclear weapons'.⁽¹⁾ The same position was again stressed by Radio Cairo on 9 December 1966.⁽²⁾

The issue of preventive war is extremely complicated. If a nuclear programme of research and development is under way, under conditions of great secrecy, who could tell the exact stage at which a certain development took place? One of the possibilities of course would be to decide that the critical stage had been reached once a nuclear test had been carried through. Usually a first test is conducted with a device and not with the actual bomb, and is a stage prior to the assembly of a bomb. At the same time, it might be argued that perhaps a prototype of a bomb had been assembled before the test, with the assumption that if the test - carried through merely with a device - were successful, the bomb would be ready for immediate use. One could also envisage a situation where bombs would be assembled in secrecy without any test.

The possible uses of such bombs is a different question (which will be discussed later), but the dilemma of the opponent remains tantalising. It may assume that nuclear bombs if they are not tested, and if their existence

(1) See BBC monitoring service ME/2262, 12.9.1966.

(2) See BBC monitoring service ME/2340, 12.12.1966.

remains unknown, are not really relevant to the problem of the balance of military power. On the other hand one may calculate that such bombs (if they existed) had in fact changed critically the balance of military power and would therefore justify a preventive strike or preventive war. But would not such a decision come too late (from the point of view of the opponent - in this case Egypt)? There are many uncertainties here which can contribute only to growing anxieties and hence to a motivation to try and strike first.

But this problem of 'when to strike' is also connected with the other problem of 'what scope of war'. Will the preventive strike be aimed at the centres of nuclear production or rather will it be a full scale war? Both on this issue and on the former one the evidence in the published Egyptian material is sketchy, and there are indications for both positions.⁽¹⁾ The lack of detailed and deep analysis of these issues appears to be not the result of considerations of secrecy imposed on the debate, but rather the consequence of a lack of sophistication at the level of strategic thinking. This is not surprising in view of the serious intellectual questions involved in such discussions, questions which could be dealt with only within a framework of a sophisticated intellectual milieu, which is

(1) Thus for example on 9 December 1966, Radio Cairo said that Egypt would have to launch a preventive war before Israel produced atomic bombs; see BBC monitoring service ME/2340, 12.12.1966.

lacking in Egypt. It also requires a tradition of thought on strategic problems which again does not exist in Egypt. But even if the situation were different and such a milieu and tradition did exist in Egypt, the question of pre-emptive or preventive war aimed at forestalling the creation of a nuclear capability, is an extremely complicated issue. This is so because of the large number of imponderables about the actual state of affairs in the producing state, and also because a decision to go to war depends not only on the nuclear problem but also and perhaps more so, on other considerations which do not have direct relevance to the problem of nuclear weapons.

A different question is whether the Egyptian army had developed or rather intended to develop, a capability to launch a surprise attack with either limited aims (like the destruction of centres of nuclear production) or general aims. If one considers the arms build-up in Egypt during the period 1956-1967 the answer is probably in the affirmative. Like the Israeli army, the Egyptian army developed the capabilities for 'blitz' strategies based on concentrations of armour and air power⁽¹⁾, which could be applied in a surprise attack, beginning with a surprise air strike. However, such a capability let alone the mere mention of the concept of pre-emptive war, did not necessarily mean that the strategy of pre-emptive war became a main strategy for the Egyptian army. Apart from the

(1) On this interesting point see Safran, op. cit., p. 250-251.

debate within the context of a possible Israel atomic bomb, the notion of pre-emptive strike had not been suggested extensively by Egyptian writers. Furthermore the notion of a pre-emptive strike must be considered within the political context, and the three main conditions which Nasser enumerated as the prerequisites before a successful war against Israel could be launched, namely Arab unity, favourable international situation and the Arab build up, suggested a different strategy from that of a pre-emptive war. (Needless to say, the distinction between preventive war and pre-emptive war should not be forgotten in this context. In a sense every war motivated by the fear that the other side is about to produce nuclear weapons or had already produced them should be defined as a preventive war, as it is not destined to pre-empt an imminent military strike by the nuclear weapons produced. It could be defined, if at all, as 'pre-emptive' only in the limited popular sense that it simply has the objective of pre-empting a certain step taken by the opponent.) A concept of pre-emptive war as a main strategy must put a premium on purely military considerations. It must postulate that notwithstanding the political situation, if a certain military development takes place, there is a need for an immediate military action to be taken. Obviously, that was not the basic military-political concept of the Egyptian regime.

It may be that under the pressure of anxieties about a possible Israeli nuclear weapon production the Egyptian regime started to consider such possibilities as

well. But perhaps a more probable explanation of the threats about a preventive war, is that they were intended mainly as a deterrent. At the same time in order to increase the credibility of this deterrent threat there was a need for Egypt to develop some applied strategic military doctrine to take account of the possibility of an Israeli bomb, by a preventive action.

Egyptian Policy and Strategy: Was there a Change?

A further problem is whether under the impact of the possibility of an eventual Israeli bomb, Egypt had decided to change her basic commitment to an eventual war against Israel (either as a long range foreign policy objective or as a short range objective). There is no positive indication of this. To the extent that there were indications of caution on the part of the Egyptian regime vis-à-vis the Arab-Israeli conflict, it appears these resulted from the non-fulfilment of the three conditions cited above. In turn, the failure was presumably based mainly on the deterrent power of the Israeli conventional forces, a deterrent power which had acquired considerable credibility through the experience of the Sinai campaign of 1956 when the power of the Israeli army had been proved. The notion that Egypt must change her basic strategy against Israel because otherwise Israel might go nuclear, has not been suggested by the Egyptians. This question is of course crucial because one of the possible justifications for the development of a nuclear option by Israel (as distinct from an actual weapons' programme) was that it might deter Egypt from continuing to

endorse the aim of the eventual destruction of Israel.

At the same time it appears that the Israeli nuclear programme must have brought about a basic reassessment of the Arab, and mainly Egyptian strategy.⁽¹⁾ But apart from pointing to the logical need, on the part of the Egyptians for such an assessment, it is not clear what changes were taken as a result of it. Heikal, for instance re-emphasized again on 15 October 1965 that 'The most prominent forces of pressure on the Arab situation are now Israel's nuclear potential and the need to be cautious and prepare for it'.⁽²⁾

But apart from raising the concept of preventive war (mainly as a deterrent) and re-emphasizing the need for strengthening the armed forces and mainly the aircraft, there was no indication of either changing the basic aims of Egypt vis-à-vis Israel or of changing the basic strategy or political prerequisites for a war against Israel. It was an indication of great concern. At the same time, the fact that Egypt emphasized, both on this occasion as on others, that she herself was the main Arab opponent to Israel and thus also the main target of Israel, though indeed genuine (because it was logical), served also to strengthen her hand in the inter-Arab competition.

During 1966 inter-Arab competition became even more acute than before, as did the fears about the alleged

(1) See Heikal's article in Ahram, 15 October 1965, quoted by BBC monitoring service, ME/1968.

(2) ibid.

American plans to encircle Egypt and the 'Arab Revolution'. Within this context, the problem of nuclear weapons in Israel was mentioned only sporadically. Another issue concerning Israeli arms received much greater publicity. ^{the case of} That was/the American arms sent to Israel after or instead of the famous German Arms Deal with Israel which was cancelled because of Arab pressures. In passing one could argue that even this American project came under fire partly as another issue of the inter-Arab competition. Thus King Faisal was criticised severely for maintaining close relations with the United States, while the latter was supplying arms to Israel.⁽¹⁾

This concern about American arms deliveries to Israel could of course be interpreted within the context of suspicions about American intentions towards the Arab 'revolutionary' regimes in general. Be that as it may, the fact remains that Egyptian attention was occupied by many issues at the time and less emphasis was put on the nuclear issue (at least on the level of declaratory policy). It may of course be that this lack of apparent concern was also due to some belief among the Egyptian leadership that there was no immediate danger of an Israeli bomb.⁽²⁾

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- (1) See for instance Heikal's article titled 'Five Questions to King Faisal' on the eve of the latter's departure for a visit to the United States, al-Ahram, broadcasted by Radio Cairo, 27.5.1966.
- (2) On this see below, in the discussion of the Egyptian diplomatic moves concerning Israel's atomic developments and the possibility of American assurances on this issue.

On 15th of May, 1967, the crisis that culminated with the Six Day War began to unfold. From now onwards, Cairo Radio devoted an ever growing place to the crisis and its causes. However, the problem of nuclear weapons was not mentioned. In Chapter 1 the causes for the crisis and war of 1967 were set out, as they have been suggested by the various observers, among which the issue of Israel's nuclear developments and the need for preventive war in order to destroy the centres for nuclear production are not mentioned. It is interesting that the Egyptian sources do not mention them either. Ostensibly, one might have expected Egyptian propaganda at least to mention the issue of Israeli nuclear developments as one of the causes for the Egyptian initial move, even if the real causes of the crisis were different, as indeed they were. By mentioning this issue they could certainly have hoped to get much more sympathy from the international public opinion than they actually got. Indeed, taking into consideration the deep anxiety in the West and particularly in the United States about nuclear proliferation, this kind of Egyptian argument could certainly have secured for Egypt at least some understanding in these quarters. The fact that the Egyptians made no mention of the nuclear issue as one of the justifications for their initial moves in the crisis, though it could have served their propaganda purposes, confirms beyond doubt that they themselves had not considered this issue as one of the rationales for their moves in the crisis.

One could of course advance two alternative reasons why the Egyptian leadership had not mentioned the issue of atomic developments in Israel as a reason for the Egyptian move in May, 1967, even if in fact this had been a serious reason for their move. First, that by raising this issue there would have been a mounting suspicion that Egypt was aiming from the very beginning at starting a preventive war. This suspicion would have caused added damage to the international image of Egypt and might have possibly brought about a stronger American commitment to Israel. These were precisely the things which President Nasser had always tried to avoid. Second, that Egypt would have refrained from mentioning the nuclear issue in order not to cause anxiety to the Egyptian army and people and to other Arab states on the eve of a possible war.

Neither of these arguments seems to be valid. To begin with, the combination of the causes suggested by Egypt itself and all the observers give a comprehensive and adequate picture of the causes for the crisis and the escalation which eventually took place, and there is no apparent reason why another one should be added. Second, by mentioning nuclear developments in Israel, Egypt could have argued that her moves were not intended to start a war, but rather as a bargaining counter to force

Israel to cease working on her nuclear projects.⁽¹⁾ By arguing in this way, Egypt could have secured a sympathetic international public opinion and also could have avoided creating anxiety amongst its own population. The burden of the evidence suggests therefore that the Israeli nuclear option was not among the causes that led to the 1967 crisis.

The Threat that Egypt would 'Go Nuclear'

Apart from the threat of preventive war as a deterrent against 'Israel going nuclear', the Egyptian regime used another deterrent, namely the threat that Egypt itself may 'go nuclear' in case of an Israeli bomb. This position which has been repeated on several occasions, was connected with the general Egyptian declared policy on the nuclear issue. This general position was on the whole parallel to the Israeli one in the sense that both countries maintained that they were not interested in introducing nuclear weapons into the Middle East. The obvious difference being that Israel was much more advanced in the nuclear field. (In the Israeli case that was as has been pointed above, the position adopted by the Eshkol

(1) That such an idea could have been accepted as valid by many observers in the West, is evident from the concern in these countries about nuclear proliferation in general and the suspicions voiced about the Israeli project in Dimona in particular. So much so that crises games were played before the crisis of 1967 ever started, on the basis of a scenario drawn along the lines of an Egyptian move against an Israel which had armed herself with nuclear weapons or was just about to do so. See for example Michael H. Banks, A.J.R. Groom and A.N. Oppenheim, 'Gaming and Simulation in International Relations', Political Studies, February 1968.

government at a certain juncture. The Ben Gurion government kept declaring that Israel was building a nuclear capacity for peaceful uses, but by avoiding discussing any actual policy on arms control measures concerning nuclear policy it in fact created menacing images in the minds of the Arabs.)

The Egyptians maintained that they would go nuclear only if Israel did it first. Thus on 24 July 1965, President Nasser in a long speech on the occasion of the U.A.R. revolution anniversary disclosed that the Americans demanded from him towards the end of 1963 as a consideration for the wheat aid, the following demands: (a) a pledge not to produce nuclear weapons; (b) to keep the Egyptian army at the same level; (c) not to produce rockets; Nasser related his answer: 'As far as we are concerned, we have no intention of producing nuclear weapons and are not working on the production of nuclear weapons. Yet all the talk you say is entirely rejected.' (1)

Another reference to the need to build an Egyptian nuclear deterrent is included in Heikal's famous article of 15 October, 1965 in which he maintained that Egypt must build her nuclear capability. (2) The question is whether

(1) See BBC monitoring service, ME/1918, 24.7.1965.

(2) See also BBC monitoring service ME/2076, 1.2.1966. Radio Cairo here quotes an article published in Al-Masā (Lebanon) reporting that the U.A.R. Deputy Premier Dr. Hatim, said to a Japanese paper that the U.A.R. was in principle opposed to nuclear weapons, but if Israel armed herself with them the U.A.R. would do the same.

this had been suggested as just a threat to deter Israel from 'going nuclear' or as a policy. However, it seems that some Israeli decision-makers considered very seriously the possibility of Egypt 'going nuclear' if Israel did. To that extent therefore, the threat had some credibility. This threat in turn also created anxieties on the Israeli side, as various observers argued that if Egypt had the capability to 'go nuclear' she would not hesitate to do so regardless of what Israel might or might not do. (1)

Either because of her inferiority in the field of nuclear developments or because of a fear that the introduction of nuclear weapons on the part of both Israel and Egypt might create a balance which would secure the status quo, there had been on the whole more emphasis in Egypt on the notion of preventive war rather than the production of nuclear weapons, as the reply to an Israeli bomb.

The Possibility of a Soviet Guarantee to Egypt

If Israel developed nuclear bombs and Egypt did not produce them, what then? One line of response could be to ask for Soviet aid for the production of these weapons, or even for the direct transfer of nuclear weapons. This however, was (and still is) completely contradictory to the Soviet position on nuclear proliferation. The Soviet

(1) See above pp. 191-2

Union was against such transfer even when her allies in Eastern Europe were interested in it. There has been only one example of transfer of knowhow and technical aid in the nuclear field from Russia, namely in the case of China in the period 1957-1960, and the Russians have regretted it ever since.⁽¹⁾

It seems however that the Egyptians at least enquired about this possibility⁽²⁾ and received a negative answer. The alternative was to ask for some sort of a Soviet guarantee against a nuclear Israel. Indeed, according to the same New York Times report, a certain Soviet promise about such a guarantee had been extended in December, 1965. This promise was given by Marshal Grechko while on visit as head of a high powered military mission to Cairo. The promise was to give a nuclear guarantee to Egypt if Israel produced atomic bombs.⁽³⁾

There was no official Egyptian confirmation of these reports. The Egyptians on their part denied it. They insisted that no guarantee was sought or received.⁽⁴⁾

(1) See on this last point, inter alia, Walter C. Clements, The Arms Race and Sino-Soviet Relations, Hoover Institution Publications, 1968.

(2) See New York Times, 4.2.1966.

(3) See on this also Radio Rabat, as quoted by BBC monitoring service ME/2081, 7.2.1966.

(4) See for example, the leader in al-Gumhuriyah, 6.2.1966, and also al-Ahram as quoted by Radio Cairo which emphasized that Egypt refused to ask for guarantees and therefore if Israel developed atomic weapons the only answer would be preventive war. (BBC monitoring service ME/2170, 20.4.1966.)

Ostensibly such a denial could stem from the wish to appear independent and to keep for propaganda purposes the position of a non-aligned power (which reminds one of the Indian position and dilemma on the same problem). However, there are doubts about the existence of a formal Soviet promise of this kind and what is more important, its effectiveness. To begin with such a promise could act as a real deterrent against Israel (in the sense that it would deter Israel from 'going nuclear'), only if it were made public and communicated forcefully to Israel. It would not be enough to promise it to Egypt within the closed walls of the conference room. It must be delivered to Israel, which was not done (at least not publicly), and it is doubtful whether a private Soviet note to Israel could fully serve this deterrent purpose. To cite just one example, by sending the note in private the Russians would have left the way open for Israel to deny that a warning had ever been sent to them. Second, it seems doubtful whether Grechko was in a position to give this promise, independently of a decision taken by the highest political leadership in the Soviet Union. Third, if indeed such a formal and definite promise was given one might have expected some American reciprocal moves or initiatives. Finally, and this comes back to the Egyptian reaction, by confirming the existence of a Soviet promise the Egyptians need not necessarily have jeopardized their position as a neutralist power. After all, this promise, if it were given, was not the guarantee itself but only a

promise to give a guarantee in the future if certain conditions were fulfilled. (In the Indian case the dilemma was whether to ask for the guarantee itself and this was after China already had its nuclear weapons.) In this context it is interesting to note that Cairo radio felt no scruples in indicating American assurances to Egypt on this issue of the Israeli nuclear programme⁽¹⁾. This suggests that it was not just a propaganda stance on the part of the Egyptians to deny the existence of a guarantee (or for that matter a promise of a future guarantee). It seems therefore that if a promise was given, it was not yet a formal definite one, but rather a loose one, and that both the Russians and the Egyptians had not formulated a joint final formal policy or strategy on the problem. Such a promise if it had been given could have only a limited deterrence value.

Another point related to this issue should be made. There were indications, or at least speculation, that one of the objectives of Israel in her nuclear activities was to create a situation whereby both super powers have to extend military guarantees to both sides of the conflict.⁽²⁾ If the Russians indicated their willingness to extend some kind of guarantee to Egypt under some conditions, Israel could approach the United States and demand some promises for guarantees if some other conditions were created. Thus

(1) See below p. 269.

(2) See for example Sources of Conflict in the Middle East, Adelphi Paper No. 26, Institute for Strategic Studies, London, 1966.

if a Russian promise to Egypt of the kind alleged to have been given by Grechko, had indeed been extended, the first stage of the Israeli objective had been accomplished. If the Egyptians and the Russians realised that this indeed was the Israeli objective and were anxious not to enable this Israeli strategy to materialise, then they should have been even more reluctant to become involved in such a promise and certainly had to try not to allow it to become public. As has been pointed above, the fact that it was not made public partly jeopardised its credibility as a deterrent. In any case it appears that the Russians were not thinking at the time in terms of guarantees to Egypt.

From the Soviet point of view there could have been both advantages and disadvantages in extending such a guarantee or the promise of such a guarantee. The advantages were quite obvious, namely to increase Soviet influence in Egypt and to deter Israel from 'going nuclear', something which might jeopardise the general policy against nuclear proliferation and also would introduce dangers of various kinds into the Middle East. On the other hand such a promise if it were to be honoured might involve the Soviet Union in situations over which she had no control. To take merely the most obvious scenario in which Israel and Egypt became engaged in conventional war and Israel was threatening Egypt with the use of nuclear weapons unless Egypt did, or desisted from doing, something. Under such conditions the Soviet Union might be dragged into the war and this certainly might prompt American intervention or at least the danger of

threat of such an intervention. At the same time, asymmetrical proliferation in a sub-system can prompt guarantees by the super-power which has commitments and interests in this sub-system. The behaviour of the Soviet Union in the Middle East from the beginning of 1970 onwards shows its readiness to become involved militarily, and might reflect upon a situation in which asymmetrical proliferation took place.

During 1966 and up to the Six Day War, Egyptian concern about Israel's nuclear developments and intentions seemed to have been slightly mitigated at least on the declaratory level. This was the result of growing pressures in other fields: the increasing inter-Arab competition, the unending war in the Yemen, the fears about American intentions vis-à-vis Egypt and the various plans for an 'Islamic alliance' directed against Egypt and the other 'radical' Arab states. But perhaps other reasons were on the one hand American assurance about Israeli intentions in the nuclear field, and on the other hand the Israeli insistence that 'Israel will not be the first to introduce atomic weapons into the Middle East'.

The most interesting piece of evidence about such an American assurance was given indirectly by Radio Cairo on 9.9.1966. The Radio commentator criticised American-Israeli co-operation in the nuclear field. He argued that there must be suspicions about this co-operation and added: 'The U.S. which has itself guaranteed that Israel will not resort to atomic weapons, built with its reactor...'. In other words, there had been some official American assurance to Egypt about nuclear developments in Israel. To what extent the Egyptians attached credibility to this assurance is another matter, and one which could not be

assessed with much accuracy. This is particularly difficult because of the propaganda effects of any Egyptian declaration on the inter-Arab competition. Indeed in the same broadcast Radio Cairo stressed once again that the answer to an Israeli bomb would be a preventive war. Still, the existence of American assurances had been confirmed. Taking into account the American concern about nuclear proliferation in general, a concern which was well-known to the U.A.R. as she was represented in the Eighteen Nation Committee on Disarmament, and the repeated American visits to Dimona, such assurances must have had some impact, if only a marginal one.

Chapter VISOME STRATEGIC AND POLITICAL CONSIDERATIONS AFFECTING
THE FEASIBILITY OF THE CREATION OF A STABLE BALANCE OF
DETERRENCE BETWEEN ISRAEL AND EGYPT IN THE CASE OF THE
INTRODUCTION OF NUCLEAR WEAPONS

A stable balance of nuclear deterrence depends both upon political, and on military-technological-strategic factors. The discussion here will concentrate mainly upon the second set of factors and on the feasibility of their development within the framework of a conflict between small neighbouring states involved in a fierce conflict. But there will also be some reference to the political implications of the introduction of nuclear weapons.

It is clear that both sets of factors interact, and that the more important ones are the political, because it is politics which is at one and the same time the ultimate goal of strategic postures and military actions, and politics which decides the initial conflict between two sides. However, to the extent that a conflict situation already exists, strategic behaviour within the given situation is one of the factors determining the degree of the stability of the relations between the conflicting parties. At the same time intermediate political steps also have great effect on strategic behaviour. Indeed, this complex of interactions should have been in a nutshell the essence and

objective of arms control theories.⁽¹⁾

In the case of the super powers, certain strategic conditions necessary to a stable nuclear balance have been suggested: second strike capability; capability for flexible or graduate response; an adequate command and control system; a flow of communication about the capabilities and intentions of both sides.

The question is, are these same conditions applicable to a local nuclear situation and could they be developed in the Middle East? Could a stable balance of nuclear deterrence develop between local rivals if all of these strategic conditions do not in fact exist? Furthermore, it would appear that a nuclear superiority (admittedly on the side of the Americans) has not interfered with the stability of the central balance of deterrence.⁽²⁾ Would such be the case in a local nuclear conflict situation? These questions evolve around the strategic conditions mentioned above. The main 'strategic' discussion below will be concerned with the problem of 'second strike capability'

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- (1) As it happened, much of the literature about arms control avoids this interaction between the political mode and the strategic one. Instead it concentrates completely on the military sphere. See for example David V. Edwards, Arms Control in International Politics, Holt, Rinehart & Winston, 1969. Negotiations on arms control, were usually conducted exclusively within the realm of things military. At the same time, their success or failure depended to a large extent on the political-strategic climate of the time.
- (2) It is a question whether the stability in this case derived from inherent strategic behaviour or from the political prudence of the militarily superior super power. Or upon the balancing factor of the Soviet threat - both conventional and IRBM's - to West Europe, or the nuclear counter-deterrent against the U.S.A. itself.

and the possibility (if such exists) of developing adequate response to nuclear threats or uses, or adequate nuclear response to conventional threats or uses of forces. The question of adequate command and control system will not be dealt with as the evidence available is not adequate. The question of communications will be discussed briefly.

The discussion of the strategic factors affecting the stability of any nuclear relationship in the Middle East, is drawing on the only known similar situation which exists currently, namely, the central balance of nuclear deterrence between the super powers. A discussion in these terms can be at best a discussion in analogies. In the first place the nuclear relationship between the super powers is still a short episode in history; then again the nature of this relationship is very different from the nature of the relations in the Middle East. Thus while engaging in this sort of analogy, one must bear in mind that there are severe limitations on such a form of argument.

Part of the discussion is aimed primarily at demonstrating that indeed there are basic differences between the two types of political relationships (the one existing between the super powers, the other that which exists, or might be emerging, in the Israeli-Arab region). This argument immediately indicates the limited nature of the analogy. However, even while pointing to the limitations of the analogy and to the obvious differences between the two types of relationships, the discussion itself is still carried out with the aid of an inventory of analytical concepts, which are

themselves the product of one kind of relationship, namely that between the super powers. This is an obvious obstacle but one which cannot be overcome.

Whereas in the nuclear relationship between the super powers the emphasis was usually more on the problem of the credibility of deterrence, the discussion which follows concentrated on the problem of stability (or lack of it), and the avoidance of escalation. This approach is partly a result of the analogy with the super power relationship and partly the result of the assessment of the 'ferocity' of the Arab-Israeli conflict, the nature of the communications (or rather lack of them) between the local powers in the Middle East, and finally, the nature of the systemic pressures exerted on the local powers in the Middle East. These last pressures are the result of the interaction of several levels of conflict and competition in the Middle East, primarily the interaction between the Arab-Israeli conflict and inter-Arab competition and conflicts.

One of the results of the systemic pressures⁽¹⁾ is that the threshold for escalation into a nuclear war appears

(1) See below in pp. 308-17 for an elaborate discussion of this subject.

to be lower in the Middle East, than is the case in the nuclear relationship between the super powers. The propensity to escalate will be higher in the Middle East, and escalation might result from a crisis which on the face of it, concerns smaller stakes (in relative terms) than is the case with a crisis between the super powers. Thus whereas the element of 'irrationality' within the framework of the 'rationality of irrationality' ⁽¹⁾ behaviour of the super powers, which on its own part is one of the elements of the credibility of the deterrent posture of the two super powers, is being fortunately continuously circumvented by the decision-makers in America and Russia, in future nuclear Middle East, this element would increase. At the same time it could be assumed that the very existence of nuclear weapons in the Middle East will impose limitations on the decision-makers. These limitations might partly counterveil the systemic pressures, but these latter would still keep the threshold for nuclear war in the Middle East at a lower level than is the case in the super powers' relationship.

The Questions of Second Strike Capability and Motivations for First Strike

The need for a second strike capability as a stabilising factor in the super powers' nuclear relations was recognised more than a decade ago and found its first public comprehensive elaboration in Wohlstetter's article 'The Delicate Balance of Terror'. ⁽²⁾ Indeed much effort

(1) For an excellent discussion of the concept of the "rationality of irrationality" and a critique of the concept and its applications, see Steven Maxwell, Rationality in Deterrence, Adelphi Paper, No. 50, Institute for Strategic Studies, London.

(2) Foreign Affairs, January 1959.

has been devoted by all the nuclear powers to developing second-strike delivery systems, with the United States leading the way and the Soviet Union following. Its relevance to the Middle East has been recognized by some participants in the public debate on nuclear weapons in Israel.

The first question is whether it is technically possible to develop a second strike capability in Israel and Egypt. The simple answer is certainly in the affirmative. There is no reason to believe that it is impossible to build hardened silos in various parts of either Israel or Egypt. Nor would the expense on such a project, if it is concerned with a small number of missiles, be prohibitive in comparison to other items in the defence budgets of both Israel and the U.A.R. Furthermore, at least for the foreseeable future, conventional aircraft could be used by both sides as the main second-strike delivery system. With the development of Vertical Take Off planes the difficulty in achieving the complete destruction of all the other side's aircraft on the ground has increased. Because of the ability of her pilots and ground crews, Israel is most probably in a superior position in this respect. But, there is no technical reason why both sides could not acquire some sort of a very primitive second-strike capability with conventional delivery systems, or at least create uncertainty in the mind of the other side as to their capability to acquire it.

At the same time such a conventional capability would be primitive and insecure, and it seems likely that because of the scarcity of nuclear bombs, both sides would try to develop missile systems for the purpose of delivering nuclear warheads. (1)

On an elementary level of analysis it could be argued that the number of bombs needed by both sides to create a credible deterrent could be quite small. Israel is very small and a very large percentage of the population, as well as the centres of economic and cultural life, are concentrated in a small part of the country. The situation as concerns Egypt is somewhat different, but not qualitatively. The greatest part of the population of Egypt is concentrated in a narrow strip of land along the Nile and the Delta. The Aswan Dam could therefore be a very obvious target. Its destruction could lead to terrible consequences for Egypt. Moreover, Egypt's urban population is concentrated in a few towns, like Cairo and Alexandria. These few towns would also be obvious objectives for a "counter-value" nuclear strike, and their limited number makes the number of bombs needed relatively small. The urban population in Egypt seems to be the real source of military and economic power in the country; the Felaheen population still lives on a very low level of economic and educational development and could not be considered for a very long time as an alternative

(1) For the Israeli possible development in this field see above pp. 129 For the Egyptian programme see above pp. 222-224.

to the urban population. The process of recovery and of building up a new professional class might take generations. What is also important to note in this context is that the present regime and presumably any future regime considers the urban population as its power base, and thus would consider the destruction of this population practically tantamount to a destruction of Egypt itself. Thus in order to destroy Egypt as a modern state, or rather as a state aspiring to become such, it would be sufficient to destroy the few urban centres of population.

If missile systems were developed as the main nuclear delivery system, then hardened silos would become the main means of creating a second strike capability. If such hardened silos were achieved, the motivation for a first strike would depend primarily on the accuracy of the guidance systems coupled with the payload of the missiles. If the accuracy is low, a decision to strike first against a nuclear silo of the other side would be tantamount to unilateral nuclear disarmament, as several bombs would be required for the destruction of one hardened silo. Thus, if both sides have an equal number of missiles with about the same payload a first strike by A in which, for example half of his missiles is used, would cause the destruction of only, let say, a quarter of the number of silos of B. The result being that B enjoys, after the attack a marked nuclear superiority over A. This would enable B to threaten or blackmail A. Guidance systems do tend to become more and more accurate to the point that eventually a first counter-

force strike, might become a plausible option.⁽¹⁾ In such a case the superiority of offence over defence reaches a point in which motivations for surprise first strike are overwhelming. The result would then be that the anxieties of both sides might lead to the danger of pre-emptive war or at least to an ever escalating arms race. To the extent that guidance systems remain inaccurate, the motivation for a first strike (counter-force or even counter-force combined with counter-city) decreases, but the motivation for an arms race is strengthened, so that a certain balance between defence and offence of the two sides as far as the nuclear delivery systems may be maintained.

Furthermore, even when guidance systems are not absolutely accurate, there might be cases in which first counter-force strikes might prove to be to the benefit of the attacker. This might also be the result to some extent of misperceptions about the actual relative capabilities of the two sides or about the vulnerability of these forces. It might also be argued that the attacker could hope to create havoc with the command and control system of the attacked and thus avoid the danger of retaliation or blackmail

(1) This tendency will be strengthened if some form of terminal target-seeking guidance would be developed and installed into warheads. The main offensive systems of both super-powers are still guided by an inertial guidance system. For details see inter-alia Ian Smart, Advanced Strategic Missiles: A Short Guide, Adelphi Paper No. 63, Institute for Strategic Studies, London, 1969.

later on. This is even more the case in an atmosphere where strategic communication is lacking, such as that which might prevail in a nuclear Middle East. (The only qualification on this observation is the possibility that the super powers would be invited to act as 'go betweens' within the framework of strategic communication. In that case they could apply their various sophisticated intelligence systems for this purpose. One of the problems in that case would be their political credibility, namely whether the local nuclear powers would trust the information supplied by the super powers.) Thus again one of the possibilities is that notwithstanding the fact that a small number of nuclear weapons is sufficient to create a credible deterrent, there might be a strong motivation to become involved in a very serious arms race⁽¹⁾. This arms race (which could be avoided only by an agreement to limit the number of missiles) would be more harmful than the arms race between the super powers, because of the smaller margins of Israel and Egypt economies. Here Israel is again in a relatively superior position vis-à-vis Egypt, because of her much higher GNP per capita (around \$1460 per head in 1968 as compared with \$186 in Egypt). But with Israel's other military commitments the burden on the economy of Israel would also be tremendous.

Whereas the number of bombs needed for the crippling of both countries is limited, there is one difference between

(1) For other reasons for such a motivation see above pp. 278-9 and below pp. 289-90.

them which is caused by the smaller size of Israel. Whereas Egypt enjoys comparatively large areas in which to install her future nuclear weapons, the same does not apply to Israel (in its pre Six Day War borders and possibly even after that but with the exception of the Sinai). Because of this relative smallness, silos could be installed not very far from cities or at least some centres of population.

This would mean a possibility that nuclear bombs directed at a hardened silo somewhere in the Negev might 'spill over' to hit one of the concentrations of people in Israel.

Such a danger would involve by necessity the blurring of the distinction between counter-force and counter-city strikes. To the extent that this distinction is important as a stabilising element in a balance of nuclear deterrence,⁽¹⁾ to blur it would destabilise the nuclear relations between Israel and Egypt. The concept of 'second strike capability' while springing from other considerations in the fifties, became related later on to this distinction between counter-force and counter-city strategies.

(1) Since reliance on "assured destruction capability", this distinction as an element of stabilising balances of nuclear deterrence no longer has the aura of a universal rule. It would apply however in a Middle East context. Indeed, it would perhaps apply at a certain stage in the development of balances of deterrence between any pairs of new nuclear opponents.

Both "second strike capability" and this distinction together combined to stabilise the balance of nuclear deterrence. This at least was the American doctrine, whereas the Soviet Union continued in building up weapons for counter-city strategy. The question of course is whether a counter-force strategy on its own does not destabilise the nuclear balance because of the images it creates. It is true, as Philip Windsor has pointed out, that the ineluctable implication of the change in the American strategic doctrine was the building of a capability for a first strike, and what is even more important that a strong suspicion was created in the minds of the Russians that indeed the Americans had adopted a first strike doctrine⁽¹⁾. This development and the 'reverse missile gap' brought about the new arms race, but had not basically destabilised the central balance of deterrence, probably because the Americans developed a credible graduate response doctrine and second, because the political climate started to change from the antagonism of the fifties to the partial thaw of expected détente in the second half of the sixties.

(1) See also on this Russian suspicion, Arnold L. Horelick and Myron Rush, Strategic Power and Soviet Foreign Policy, University of Chicago Press, 1966, esp. pp. 83-103 and Oran Young, The Politics of Force, Princeton University Press, 1964, p. 88.

In conflict situations between two powers, there is a mutual suspicion that the other side contemplates a first strike. There are two interacting problems here: first, how to reduce fears of first strike; second, if because of political and psychological reasons, this fear cannot be reduced substantially, what is the best strategic doctrine within which a fear of first strike would be less conducive to instability? It could be argued that in some of these conflict situations a counter-force strategy or at least the ability to develop such a strategy and distinguish it from a counter-city strategy, is more conducive to nuclear stability. This is so because of the damage limitation effect of a counter-force strategy.

In the Israeli-Egyptian situation, there are two reasons why there is in any case a strong mutual image of an inclination towards a first strike posture within the context of any nuclear strategy: first, the deep rooted inclination to use surprise first strike strategies, an inclination which might spill over into the atomic field, and which would be difficult to erode even with the introduction of a second strike capability; second, the ferocity of the conflict between the sides, which (and specially if the present situation continues) would lead to a completely new historical phenomenon, namely the emergence of two nuclear powers which are continuously engaged in some sort of limited war, a war which escalates continually or at least contains a potential for a dangerous escalation.⁽¹⁾

(1) On both these points, see below pp. 299-302; 306-8.

There are also two reasons why precisely a counter-city strategy in the Israeli-Egyptian case would be more conducive to the creation of fears of first strike (contrary to the situation in the central balance of deterrence): first, the belief in the Israeli public that the main objective of the Arab world is to bring about a complete physical annihilation of the Israeli population, something which could 'best' or most efficiently - if at all - be accomplished by a surprise total counter city attack. It is not important in this context whether this image is a valid reflection of reality or not. It is sufficient that the image exists and is indeed very prevalent in Israeli society; second, the possibility of a catalytic war initiated by a third Arab country and aimed at the mutual destruction of both Israel and Egypt. This possibility could be envisaged as a result of the interaction between the inter-Arab competition and the Arab-Israeli conflict. An Arab state could try to provoke Israel and Egypt into a war while itself remaining outside the ring. The provocation could be brought about in different ways: Syrian behaviour on the eve of the 1967 crisis in the Middle East serves as an example.

The strategy which appears to be most conducive to nuclear stability is the one based on a second strike deterrence, which combines elements of counter force and counter city capabilities, which on their part enable parties to develop flexible response strategies. As will be shown below, in the Israeli Egyptian situation, it will

be very difficult to develop any 'pure' counter force strategy, and hence there will be no possibility of developing any strategy based on a combination of counter force and counter city strategies.

Thus, because of the strong suspicion on the part of both sides that a first strike is contemplated anyway; and because in the Israeli-Egyptian case, a 'pure' counter-force strategy is impossible to develop, and hence no flexible nuclear strategy of any kind, and lastly because a counter-city strategy in this context is conducive to the creation of fears of first strike, the introduction of nuclear weapons into the Israeli-Egyptian region will be more destabilising than was the case with the relationship between the super powers.

The line of argument below will be twofold: on the one hand to show how difficult it would be to develop a credible and defensible counter-force strategy, while on the other to look at the role of mutual images which will emerge as a result of the introduction of counter-city strategies, briefly listed above. After that will come a discussion of the systemic pressures on the possible future nuclear relations between Israel and Egypt.

The impossibility of developing a 'pure' counter-force strategy

As has been pointed above, the small size of Israel would mean that an Egyptian first strike might "spill over" into the Israeli centres of population. This possibility will on the one hand increase the motivation on the side of Israel to strike first, while on the other hand the Egyptian perception of this Israeli motivation would again increase the Egyptian motivation to strike first.

There is of course another level of consideration at which such an unintentional nuclear 'spill over' from counter-force strategy to counter-city strategy may change the deterrence posture of Israel and this involves the question of whether Israel would be ready to retaliate massively to an Egyptian first strike. For example, if Egypt realised that a counter-force first strike could very well hit an Israeli centre of population because of the geographical limitations of a small country, she would also need to consider the certainty of an Israeli reprisal against Egyptian cities. This would cause further hesitations on the part of Egypt. On balance, however, it appears that a clearer distinction between the two types of strategies, and at least for reasons indicated above and below, the ability to develop strategies and delivery capabilities which involve distinguishing between them, is important for the stabilisation of a nuclear balance of deterrence.

The problem would be compounded if it were believed that nuclear warheads were being carried by conventional aircraft as well as by missiles, or only by the former. As some

of the air bases are situated near centres of population, any counter-force first strike would almost certainly 'spill over' into these centres of population. Thus every nuclear first strike against Israel would by definition be also a counter-value one.

Given the poor quality of the Egyptian air defence (as was shown during its performance in the Six Day War and again during the 'War of Attrition'), it seems reasonable to assume that the Egyptian High Command would assume that conventional aircraft could serve as an important delivery system for Israeli nuclear bombs and would therefore have to accept that a first counter-force strike by Egypt aimed at crippling the Israeli nuclear delivery vehicles must inevitably hit centres of population. Thus the High Command must recognize from the first that it cannot develop a real counter-force strategy. At the same time the Israelis must assess this kind of reasoning on the part of the Egyptians, and thus formulate an image of the readiness of Egypt to employ a counter-value strategy.

Another consideration which is raised here is the general perception in Israel of the Arab objectives as regards Israel. There is a widespread view in Israel that the ultimate intention of the Arabs is to exterminate physically all the Israelis or at least the great majority of them.⁽¹⁾

(1) On this 'Streicher' image of the whole conflict see for example, Michael Brecher, 'Ben-Gurion and Sharett's Conflicting Images of the Arabs', The New Middle East, No. 18, March 1970.

Such an image of Arab intentions would only strengthen the Israelis' belief that the obvious inclination of the Egyptian High Command was to concentrate on both a counter-value strategy and first strike, again because of the reasons listed above. This perception would inevitably lead Israel also to develop a counter-city strategy as the only reasonable deterrent against a parallel Egyptian doctrine.

In any case, in a situation in which the two sides have a limited number of warheads there is a high probability, at least in the first stage of nuclear armament, that both would develop a counter-value doctrine rather than a counter-force doctrine (which would entail the production of many more warheads). The paradox in the situation is that the possibility of a credible second strike capability would increase precisely because the two sides would have adopted counter-city strategies, and also because of the limited number of warheads and the understanding that counter-force strategies would not secure necessarily any superiority.⁽¹⁾ What would increase however is the motivation for a surprise counter value strike with the hope that after the destruction caused to the other side there would not be any nuclear response, or again because of the great fear that the other side would strike first in any case. In other words, whereas a second strike capability was and still is an extremely important element in strengthening the stability of the balance of nuclear deterrence between the super powers, and while it

(1) See above pp. 278-9.

is conceivable that Israel and Egypt could develop a limited, rather primitive and increasingly - in terms of the local GNP's - expensive second strike capabilities, it is also true that the relevance of these capabilities as a factor enhancing the stability of a nuclear balance of deterrence in the Middle East would diminish. Even if the two sides developed this limited capability (which needless to say is still a basic requirement but not a sufficient one), they would not be able to develop the corollary 'pure' counter-force strategy which is required (even as an alternative strategy) in order to keep options open and to decrease anxieties and suspicions.

It emerges therefore that both sides would have to employ first strike counter-value strategies, a requirement which would change only if they developed sophisticated delivery systems with many warheads. The development of such systems would involve them in an extremely expensive arms race, which they can ill afford and especially while the limited war between them continues (both sides are already spending now more than 20% of their respective GNP's on defence). But in fact the logic of deterrence might force them to allocate the same proportion of resources, once they went nuclear. Another requirement for the change in these strategies is some tacit or formal agreement about precisely such a change. But even if these two requirements, namely a more elaborate nuclear weapons delivery system and agreements about strategies, were met, still the knowledge that only a limited number of bombs would be sufficient to cripple

completely the societies of the two opponents, and the anxieties about the intentions of one's opponent will put a premium on and create motivations for first strike counter value strategies.

As counter-force or mixed or flexible strategies act as 'damage limitation' factors, and as this factor is important in enhancing the credibility of the deterrent and thus enhancing the stability of the nuclear relationship, the impossibility to devise such a complex strategy, will again affect the stability of relations between the two local opponents. (Other 'damage limitation' measures like ABM systems and elaborate nuclear shelter programmes are so expensive, and ABM needs such tremendous technological capability, that they are not likely at all to exist in the Middle East even in the most remote future.)

The dangers of this situation are obvious. Although technically a primitive second strike capability could be developed, the anxieties on the part of both sides and the fear that one side would launch a counter city strike in the hope of destroying the centres of population of the other side before it was too late, and at the same time hope that the opposing centres of command would be destroyed, and thus the danger of retaliation limited, this danger would become considerable. It could be partly overcome only if hardened silos were developed and most of the nuclear warheads were put in them. These silos should then be sited as far away as possible from centres of population. In the case of Israel

this could be done, and even then only in a limited way, if the silos were constructed in Sinai, and if these arrangements were communicated to the other side in a credible way. Even then, these steps should not contradict the opponent's basic strategies and political interests.

The Problem of Rationality

In short, a high degree of communication between the two sides and a high degree of rationality on the part of both sides is necessary. (1)

It could be safely argued that the element of irrationality involved in decisions and assumptions in the Arab-Israeli conflict is rather high. There are many mutual misperceptions between the opponents. It is however also true that because several of the Arab countries are involved at the same time in various kinds of conflicts with

(1) The term 'rationality' is used here in the sense suggested by Sidney Verba in 'Assumptions of Rationality and Non-Rationality in Models of the International System', in Klaus Knorr and Sidney Verba (ed.), The International System: Theoretical Essays, Princeton University Press, 1961. Verba's definition could be expressed in a short way in his following words: '... Non rational models assume that when an individual is faced with a choice situation in relation to an international event ... he responds in terms of what we shall call non-logical pressures or influences. These are pressures or influences unconnected with the event in question ... A non logical influence is any influence acting upon the decision maker of which he is unaware and which he would not consider a legitimate influence upon his decision if he were aware of it.' Rational models of individual decision making are those in which the individual responding to an international event bases his response upon a cool and clearheaded means-ends calculation.

one another and must in consequence take decisions at varying levels which are not always consistent, their behaviour appears to be more irrational than in fact it is. For this reason 'inherent' irrationality should not be overstressed. Bearing this qualification in mind, the conflict is not dissimilar to other conflicts in the way it has developed. Still, both for reasons of 'inherent' irrationality and 'apparent' irrationality, an arms control agreement of the type suggested above would be more difficult to achieve than in some other conflicts. It should be noted in passing that the difficulties rise more from 'apparent' irrationality, i.e. pressures arising from inter-systemic disputes, than from - as is usually believed - 'inherent' irrationality. The latter in fact - as involving misperceptions - could be changed in due course of time (albeit perhaps over a longer time than in other conflicts).

Israeli Missile Silos in Sinai

But the idea of situating missile silos in Sinai, for example, as an arms control measure, is by itself an example of how arms control measures may contradict the political and indeed strategic interests of one party, in this case Egypt. It is certain that Egypt would not be interested in any nuclear arms control agreements which perpetuated Israel's control of Sinai.

But even discounting this important political reservation, there is another dilemma involved in such an Israeli

move. Nuclear weapons in the hands of Israel would presumably have three alternative objectives: to deter the Egyptians from starting a war in which they might have a conventional superiority; to deter Egypt from launching a nuclear war; to deter the Egyptian forces from completely destroying Israel if indeed a conventional war had begun and Egyptian forces were advancing towards the centres of Israeli population. The credibility of the Israeli deterrent would increase, if precisely in the case of all these three alternatives there were doctrines for credible response. Now, by positioning the missiles in the southernmost part of the country which is closest to Egypt and hence most likely to fall into the hands of an even limited successful Egyptian thrust, Israel would be faced with an agonising dilemma. Not to use her nuclear weapons would mean either that they fell into the hands of the Egyptians or that they were simply destroyed with the consequent loss of the nuclear deterrent. On the other hand, their transference to positions closer to the main centres of population in the north would incur the blurring of the distinction between counter-force and counter-city strategies. Again, an Israeli use of nuclear weapons when the Egyptian forces had secured just a limited success and when there was still hope that by conventional means Israel would be able to defeat the enemy or at least contain him, would be a form of irresponsibility which would invite an Egyptian nuclear counter strike.

Moreover, the very installation of the missile silos in Sinai, might lead the Egyptians to consider from the

beginning all the above mentioned possibilities. In that case Israeli deterrence capability even against a limited Egyptian attack might be strengthened, but on the other hand, it might lead Egypt precisely to launch a first nuclear strike. This latter calculation would be the result of the interaction of political and strategic factors: if the regaining of Sinai remains a vital national interest for Egypt, the Egyptians might be pushed into an attempt to regain it, come what may. In such circumstances the motivation to attack would be overwhelming and the problem of credible response, short of complete mutual annihilation, of great importance. An Egyptian understanding of the grave dilemmas facing Israel under such conditions as those enumerated here, might lead them to assume that Israel would launch a nuclear first strike in the first stage of an Egyptian conventional attack. The Egyptian conclusion might be a need to attack first with nuclear weapons against the Israeli silos. (This depends on the assumption that guidance systems became accurate enough to ensure that the attacker would not in fact disarm himself by attacking.) The problem then would be how to limit a possible exchange to counter-force strikes. Theoretically this is possible, but in practice it would involve again a high degree of tacit understandings between the two sides as to the way in which such wars would be fought, an understanding which is still very far from everybody's expectations.

Thus, on a certain level and within the framework of nuclear strategic thinking, the installation of missile silos in Sinai could be conducive to an increase in stability, because it enables the two sides to develop an

option for counter-force strategy. At the same time because of the political problems involved, precisely such an installation, which assumed the continuation of Israeli control of Sinai, might lead to strong motivations and hence anxieties, for an Egyptian attack. But once these political considerations interact with the strategic ones, there is again a danger for fears of first strike and there are grave difficulties in evolving arms control measures to limit whatever nuclear exchanges which might take place, to counter-force strikes.

The difficulties for example that Israel for one, would encounter when trying to apply a nuclear response to a limited successful Egyptian military probe, apply with further complications also to a situation where missile silos are installed only within the confines of Israel proper (within the borders of pre 1967). The difficulty there would be how to react with nuclear weapons to a limited Egyptian conventional success: Whether to launch a limited nuclear strike or not. And again, if the silos were installed in the southern part of Israel, which is the furthest from centres of population but at the same time closest to the Egyptian border, what about the possibility that they would be overrun by a limited Egyptian attack? Such an attack would not presumably endanger the very existence of Israel, but for Israel not to respond by a resort to a nuclear strike might mean the loss of the silos themselves or at least an important part of them.

From the point of view of nuclear stability and if only strategic considerations are applied, the 'Sinai

scenario' has some obvious advantages as compared with the 'Israel proper scenario', because it enables development of more flexible nuclear options. But it has the major disadvantage that politically, it would increase the motivation on the part of the Egyptians to try and start some military action.

Thus the limited size of Israel and the fact of shared borders create an obstacle to the development of a stable balance of nuclear deterrence quite apart from the question whether the small size invites an annihilating counter-city strike. To summarise, the notion that because Israel is smaller than Egypt a nuclear exchange would by necessity affect her more than it would Egypt is not valid. As was noted above Egypt would suffer from a nuclear exchange to a very high degree, indeed to such a degree that would be unacceptable to its regime. This at least would be the situation as long as either a military regime or a regime intent on quick economic development remains in power. Both such regimes would perceive the destruction of the urban population of Egypt as the greatest possible disaster. But where the small size of Israel compared with that of Egypt does come into account, again as has been noted above, is that it makes it much more difficult for the development of a stable balance of nuclear deterrence.

There is another implication of the small size of Israel and Egypt within the context of a discussion of second strike capability. This is related to the distinction

between the concepts of deterrence and defence.⁽¹⁾ Whereas in the relationship between the two super powers, the creation of a second strike capability means both that deterrence has been strengthened and that there is still some meaning to the notion of defence as well, in the relations between small states like Israel and Egypt, the situation is completely different. In the first case, a first strike against the nuclear forces of the other side would still leave the country mostly intact. This could even be partly achieved by a combined first strike against military and civilian objectives. In the relations between Israel and Egypt, a first strike against the nuclear forces of the other side would automatically mean the overwhelming destruction of the society under attack. The existence of the second strike capability would have meaning only within the context of deterrence and not within the context of defence. Thus two main differences emerge here between the meaning of a second strike capability in the Israeli-Egyptian context on the one hand and its meaning in the context of the super powers. First, in the case of the super powers, a second strike capability would have a meaning both as a 'deterrent' and as a 'defence'

(1) For a valid theoretical discussion of the distinction between the two concepts and also of the relevance of different nuclear weapon systems and different strategic doctrines to these concepts, see Glen Snyder, Deterrence and Defence: Toward a Theory of National Security, Princeton University Press, 1961.

measure, in the sense that a first strike would leave part of the attacked country unaffected, and thus the damage limitation factor would be quite high. Second, the ability to develop flexible response strategies would again be high. In the case of small powers, both these possibilities are closed and the only available strategy would be a massive retaliation one.

Another disadvantage and a very important one, would be the inability of powers like Egypt and Israel to develop doctrines of limited conventional war or, for that matter, graduated nuclear war or limited tactical nuclear war. This again would diminish the credibility of the deterrence posture of the nuclear weapons in the case of a limited failure in the conventional battlefield. From the Israeli point of view the situation would pose certain dilemmas. To begin with, the existence of nuclear weapons would diminish the capability of the superior Israeli conventional forces to retaliate in force in case of strong provocation from Egypt or from an Arab ally of Egypt. It would mean in fact the end of the period in which the Israeli conventional forces were an important instrument of politics and diplomacy. This would be so because of the dangers of escalation into a nuclear war.

It would mean that a limited action by Egyptian forces that might be successful could not be encountered by a strong reaction on the part of Israel. Furthermore, if

no settlement was reached between the two sides, and the Sinai Peninsula remained for the time being under Israeli occupation, but without being firmly and legally annexed to Israel, pending future understanding, there would be two obvious consequences. On the one hand Egypt would consider this territory as her own and would thus feel compelled to try to take it back with the force of arms if need be. On the other hand the commitment of Israel to keep this territory at all costs as part of her territorial integrity, would be less credible or would at least appear to be less credible. Under such conditions the common agreement to the 'rules of the game' would be lacking. The likelihood of misunderstanding leading to 'misescalation' and to conventional war would increase.

Another dangerous situation arises from the development of strategies of surprise air strikes, as was evident in and after the Six Day War. The Israeli victory in the war was preceded by a successful surprise air strike. This victory created a series of both valid and mistaken, images on the Egyptian side. Many Egyptian officers came to believe by analogy that a successful surprise air strike is already equivalent to a total victory in a future war. This was a misperception, as the Israeli victory could have been secured even without the successful air strike. However, this misperception is

common among Egyptian military leaders, and could prove dangerous once applied to a nuclear situation. In that case the question would not be the possible success or failure of such a surprise strike but to what extent nuclear stability could survive. As strategic doctrines tend to lag behind the introduction of technological innovations in the field of armaments, and all the more so in the case of a still undeveloped country like Egypt, there would be the danger that for some time after the introduction of nuclear weapons, the army leadership would continue to retain the misperception about the advantages of a surprise attack. The fear that certainly these leaders would have, namely that Israel on her own part would apply the same strategy to nuclear weapons, would only strengthen this Egyptian tendency.

This spill-over of strategic doctrines from the conventional field to the nuclear one is of great importance. It is interesting to note that the United States and the Soviet Union became (one after the other) nuclear powers after a long experience in a certain kind of conventional war, namely the Second World War, which showed that in such a war what counts in the end is not a surprise quick strike but the accumulation of manpower and economic and technological resources. They saw in fact that their opponents exercised the 'Pearl Harbour' and Blitzkrieg doctrines to no avail, and their approach to the problem of nuclear weapons in the first stages of the atomic period was influenced to some extent by these experiences. This

was certainly more evident in the Russian case than in the American one. In the latter case, the notion of the supremacy of the strategic bombardment was more widespread. However, even this notion was different from the 'Pearl Harbour' variants, and in any case within the nuclear context this notion was used mainly to strengthen the trend to base American strategy on the concept of deterrence rather than as a doctrine for actual use. (There had been however a school of thought in the United States which thought seriously about the possibility of a 'nuclear Pearl Harbour'. But the main body of strategic thinking was concerned more with the deterrence effects).

The 'Pearl Harbour' and other surprise attacks and Blitzkrieg doctrines were formulated as conventional⁽¹⁾ counter-force strategies. Their application to nuclear relations between Israel and Egypt, would create a motivation to 'knock out' the nuclear delivery systems of one's opponent. In the presumed absence of a capability to develop a "pure" nuclear counter-force posture, one variant of a nuclear 'Pearl Harbour' doctrine might mean a first strike counter-city doctrine. In any case a premium on a surprise first strike would create great instability in the relations between the two countries.

To sum it up, the images of the Egyptian military leadership developed after the Six Day War and partly as a

(1) 'conventional' in this context means a war fought with conventional weapons.

result of this war, of both Israeli intentions and possible future strategic doctrines and also the misperception of how they (namely the Egyptians) could best defeat Israel, namely by a surprise air strike, would a priori destabilise any system of relations between the two countries in which nuclear weapons were acquired by both sides.

The Political Prerequisite

This leads to the main question involved in the stability of any balance of nuclear deterrence, namely to what extent there is a need for an a priori political stability before the introduction of atomic weapons into the system, in order that a measure of stability would be created. It is undeniable that the balance of nuclear deterrence between the super powers was a major contribution to the elimination of a third world war. Still there are three questions here: First, to what extent were the relations prior to the introduction of nuclear weapons more stable than is the case in the Israeli-Arab conflict; Second, to what extent did the introduction of nuclear weapons add or detract from this stability; third, to what extent changes in the balance of deterrence caused by various factors (strategic, political, technological and psychological), affected the political stability between the two super powers. As has been suggested above, once the balance of deterrence had been stabilised - and this stabilisation is a continuous process and demands continuous attention and effort - it increases the stability of the

bipolar system. Moreover, the balance of nuclear deterrence has become more and more identified with the complex political relations between the two super powers, and to an extent with the general relations between east and west. By becoming so identified it was both affected in a favourable way by the changes in the political climate in the international system and also contributed significantly to these changes.

At the same time, if the balance of deterrence became more stable not only because of developments in the technology of weapons (like the creation of a second strike capability), in the strategic doctrines and in the reciprocal images and perceptions both sides have of both the nature and the uses of nuclear weapons and of the intentions of their opponents, but also because of the changes in the political climate in the world; if again, these political developments had much to do not only with nuclear weapons but also with the Soviet-Chinese relations, with domestic problems and inter-alliance problems, then the nature of the growing stability of the balance of deterrence becomes clearer. Again, if the forties and fifties were dangerous and unstable, it was not only because of lack of understanding about the nature of nuclear weapons but also because of basic political reasons and because of the novelty of the whole nuclear situation, a novelty which needed studying before new ways of coping with the new dangers were worked out.

It appears at the present time that even the limited political stability which was maintained in Europe in the forties and fifties, was and is lacking in the Arab-Israeli conflict. This absence is related to, or is the function of, two characteristics of the conflict: the ferocity of the conflict and the number of effective actors. This is not the place to elaborate upon the structure of the Middle East sub-system and the structure of the Arab-Israeli conflict. Suffice it to say that first, there are several conflicts which are coincidental and interacting in the Middle East and only one of them is the Israeli-Arab one, and, second that there are several levels to the Arab-Israeli conflict itself. There are at least four conflicts going on at the same time between Israel and the Arab countries, namely the Israeli-Egyptian, the Israeli-Palestinian and the Israeli-Syrian; another conflict is that between Israel and Jordan, but this last one is becoming more and more subsumed by the Israeli-Palestinian one. Apart from these active conflicts, some of the other Arab countries are involved in different ways and in varying degrees of intensity in the general conflict. As far as the first point is concerned, what is important to remember is that the inter Arab conflict, namely the competition for power positions and hegemony in the Arab world, has been since 1948 interwoven with the Arab-Israeli conflict in many ways and on different levels.

Thus we have a picture of extreme complexity as far as the system is concerned, and this complexity works against a "rational" process of decision-making within the context of the Arab-Israeli conflict or at least makes such a process extremely difficult.

What is also important to note is that all three or four Arab-Israeli conflicts have at least two sets of causes. First of all, there are state interests and 'tangible' geopolitical or 'power political' causes. These causes are in the last analysis the most important ones. But beyond them and in some cases side by side with them, there is a whole series of mistaken images and misperceptions which the two sides have of each other. These misperceptions, which are certainly more evident on the side of the Arabs⁽¹⁾, combine with the basic interest's questions to create an extremely intense conflict. But the actual development of the conflict and the recurrent escalation into violence, are mainly due not to these basic causes, but to other intermediate factors, like the lack on the part of both sides of a tradition of war and peace; some mistaken strategies pursued by both sides, and the perceptions both sides have of their opponent's intermediate policies and strategies.

(1) For an extensive study see Yehoshafat Harkabi 'Emdat Ha'aravim Besichsuch Israel-Arav' (Hebrew), Tel-Aviv, 1968.

One of the criteria by which to distinguish between different conflicts, as far as the role of violence is concerned, and also the limitation on this violence, is that of levels of ferocity or levels of hostility. Measuring such levels is a very difficult task. It could perhaps be done by counting several different variables: first, the incidence of the outbursts of violence - the number of wars and clashes short of war; second, the number of actual casualties in the various wars and other outbursts of violence in comparison to the size of populations involved; third, the attitudes on both sides and the way in which they see the other side; and also the way they envisage the resolution of the conflict. Taken together these criteria can be used to indicate the ferocity of any conflict.

It appears correct to assume that the Arab-Israeli conflict, assumed, after the Six Day War, the nature of conflict with high ferocity. To say this is simply to repeat in different words what has been suggested before, namely that the political situation in the Arab-Israeli conflict is today much worse than was the international political situation during the first phases of the Cold War.

Of the three criteria suggested above for the 'ferocity' of conflicts, the first and third apply to the Arab-Israeli conflict. Even before the Six Day War, there were two other wars between Israel and the Arabs (1948 and 1956) and there was a succession of limited violent military actions along the borders. Second, the political elites

of both sides (and in the Arab case there have been of course several states involved with differing attitudes and positions), had and still have diametrically opposed conceptions about the rights and wrongs involved in the conflict and the ways in which to resolve it. The number of casualties was not as high as in some other international violent clashes. But the prospect of the conflict being a prolonged one creates an image of a high rate of casualties to be expected. Thus, at least on two counts, the Arab-Israeli conflict could be considered as being at present a 'ferocious' one.

Another element which complicates the conflict and adds to its ferocity is that on a certain level, it is a civil war, in the sense that the Palestinians feel that the whole of Israel belongs to them and that until their objective is secured, every military measure is allowed. Other Arab countries adhere to the same objective or at least pay lip service to it.

One of the arguments advanced in Israel against the introduction of nuclear weapons into the Middle East was that the way to resolve the Arab-Israeli conflict should be political, and that the introduction of nuclear weapons into the area would only create anxieties and accelerate the arms race. The contrary argument was that nuclear weapons would stabilise the situation. Both these arguments should be put into the context of the model about levels of ferocity of the conflict. Whereas the first argument appears to be valid, it should be qualified by the

amendment that at a certain stage and after the level of the 'ferocity' of the conflict has been lowered, a stable balance of nuclear deterrence could further stabilise the political relations, provided the other difficulties (to be found in the "strategic" field) on the way to a stable balance of deterrence had been overcome. But at the level of hostility in which both sides find themselves at present, it seems almost certain that the political requirements for 'nuclear stability' do not exist.

The other structural element which makes the creation of a stable balance of deterrence in the Arab-Israeli region more difficult, is the number of effective actors. Apart from the main actors, namely Israel, Egypt, Jordan, Syria and the Palestinians, there are also other Arab countries like Iraq and Saudi Arabia which have some role to play in the conflict and can, albeit to a limited extent only, influence its development. Any of the major Arab states might be interested in some circumstances, in bringing about a conventional war, which might escalate into a nuclear war, between Israel and Egypt or between Israel and another Arab country. This observation need not necessarily be taken as a definite prediction, but rather as a strong possibility. The following scenarios are based on such a possibility, and thus will illustrate a set of dangers which might result from nuclear proliferation in the Middle East. The following scenarios will deal only with Israel and Egypt, as it is inconceivable that any other Arab country will acquire nuclear capability in the foreseeable future. Indeed, it is improbable that

Egypt herself will become such a power unless an existing nuclear power were prepared to supply her with either the bombs themselves, or alternatively with extensive technological knowhow and financial aid. However, this external aid is conceivable in some circumstances, and hence the discussion is not altogether improbable.

Provided that the Arab-Israeli conflict and the intra-Arab competition or conflicts were to retain their basic characteristics (and at least as far as the second is concerned this seems most probable), the motivation for a third Arab state to provoke a clash between Israel and Egypt, provided she would not herself be hurt remains quite high. It is not necessarily that this third Arab country will aim from the start at bringing about a nuclear war, but she might be ready to provoke any kind of war, probably a conventional one, which might lead, even without this being contemplated from the first to a nuclear war. This action on the part of an Arab state could be motivated either by ignorance of the nature of nuclear weapons and nuclear diplomacy, thus not realising the dangers involved in such tactics, or precisely because of the understanding of the nature of nuclear weapons and the intention of creating havoc.

This assumption about motivations on the part of third Arab countries, is extrapolated from past experience. Some of the obvious examples for such behaviour are:

(a) the attempts by Fatah prior to the 1967 war to provoke precisely such a war between Israel and the conventional armies of both Egypt and the other Arab countries; (b) the recurrent attempts by Syria to do precisely the same thing and this time not necessarily with a view to 'solve' the Palestinian problem, but in order to secure a better position in the Arab world within the context of the 'Arab Cold War'⁽¹⁾; (c) the position endorsed by Saudi Arabia since the Six Day War, which amounted in fact to an attempt to keep the Egyptian-Israeli conflict at a very high level while not interfering in it physically. Thus Saudi Arabia is ready to pump a certain amount of money into Egypt but only on the condition that the latter would be ready only to endorse a military solution and reject a 'political solution' to the conflict.⁽²⁾ The Saudi interests are obvious: as long as Egypt was engaged in her conflict with Israel she would not be able to recover economically, her dependence on Saudi Arabia would increase and her ability to increase its influence in the Arab world would further diminish. Indeed, one of the results of the Six Day War was the termination of Egyptian involvement in the Yemen and the diminution of her influence in Southern Yemen as well.

(1) The term is taken from the excellent study by Malcolm Kerr The Arab Cold War, 1958-1967: A Study of Ideology in Politics, 2nd ed., London, 1967, which describes extensively the process of negotiations between Egypt, Syria and Iraq during the beginnings of the sixties.

(2) The number of press reports on this position is extensive. See for example press reports before the convention of the Arab summit in Rabat in December 1969.

An attempt to provoke a war (a conventional or even a nuclear one) would be the result of a complex process. It could come like the manoeuvres preceding the 1967 war when a certain element in the Arab world had assumed that provoking Israel would force Egypt to intervene after a certain process of provocation and retaliation; and then Egypt would succeed in forcing her conditions upon Israel as a result of a supposed Egyptian conventional superiority. In a nuclear situation some Arabs might hope that this could happen or that Israel might be forced to give in before hostilities started, because of fear of a nuclear exchange. Or again it could come about if a nuclear Egypt signed a military pact with another Arab country and found herself in the awkward position - so well known to the super powers - of either having to climb down from her commitment in case of a war between Israel and her ally, or to become (that is, Egypt) involved in a risky situation in which escalation might bring about a nuclear war between the two nuclear powers in the region.

The introduction of nuclear weapons into the Arab-Israeli region could certainly create grave problems to Egypt in the intra-Arab field, precisely because of the logic, and the paradoxes, involved in the nature of nuclear weapons. The dilemma facing Israel's Arab neighbours, would be whether to seek Egyptian protection against a possible Israeli nuclear blackmail or rather to refrain from it precisely because of the dangers inherent in such a situation. The history of the last twenty-three-odd years, shows that under such conditions and when states

feel a great threat to their security, they usually tend to seek guarantees from their stronger allies. The dilemma for the Arab countries bordering on Israel would be not whether an alliance and guarantee would bring about instability in the balance of deterrence between Israel and Egypt but rather, which power they should fear more, namely a nuclear Israel which might (at least according to the prevalent Arab images) threaten them, or Egypt, which has plans to control eventually the whole Arab world (or again this at least is the image of her objectives, an image which most Arab decision-makers appear in fact to have).

It is impossible to predict which course of action these Arab countries would take; suffice it to say that if indeed Israel's Arab neighbours as a result of their fear of a nuclear Israel, joined Egypt in a meaningful military alliance, one of the politico-strategic objectives of Israel - namely to keep the Arab world as divided as possible - would be frustrated. At the same time if indeed such a military alliance came to pass in such a way that Egypt's control over its allies is not too strong, the dangers of miscalculation or of a Machiavellian deliberate calculation on the part of the allies or one of them, are quite obvious. Syria guaranteed by Egypt, might start provocation along her borders with Israel in the hope that Israel might self-deter herself from retaliating because of fear that Egypt would invoke her treaty with Syria, thus creating a danger of nuclear war. In such a case, Syria

could appear as the defender of the Arab world, and as the only country prepared to tackle Israel and indeed to get away with it. Again Syria might provoke Israel with the deliberate intention and hope that Israel would indeed retaliate, thus putting Egypt into a 'no win' situation; if Egypt intervened, she and Israel might face escalation into nuclear war, and if she (Egypt) did not intervene her position in the Arab world would suffer considerably.

It is necessary within this context to consider the notion advanced by several scholars of the irrationality and irresponsibility of small powers in regards to the question of nuclear weapons. The argument is that small powers would tend to act irrationally once they have nuclear weapons. An analysis of the former example, shows that the real problem is not necessarily that because of inherent psychological reasons these powers will use in an irrational way the nuclear weapons which they control but rather that because of the dilemmas they face as the 'big' allies of other small powers they might be forced to act in a way which is irrational and which they would have avoided were it not for their political relationship to their allies. The problem is really a structural one and not a psychological one. To provoke a nuclear war between two other powers, a war in which the provoking party is not involved, is certainly immoral and might in all probability lack prudence. It is not necessarily an irrational step to take. As far as irrationality is concerned, the question is really how Israel and Egypt themselves would behave once they became nuclear powers. One

could argue, albeit without any proof, that these powers would behave with less rationality than the super powers. At the same time one could argue that once they had nuclear weapons in their arsenal, this fact of life would impress itself upon their conduct. As either argument could be pursued without the possibility of assessing its validity, it would appear more useful to assess the structural conditions prevailing in the area and in the Arab-Israeli conflict and to contemplate how - even if both sides behaved in a manner not less rational than the two super powers behaved during the nuclear period - the outcome might still be more catastrophic than in the super-power relationship.

As far as the problem of irresponsibility - as distinct from irrationality - is concerned, one could add that the two super powers themselves behaved sometimes in a somewhat irresponsible manner or at least were ready to do so. At a certain level the doctrine of massive retaliation if handled, not by the shrewd and sophisticated Dulles but by somebody less capable than he, bordered on nuclear irresponsibility. The Truman Administration contemplation of the use of nuclear weapons in Korea is another instance of such possible irresponsibility or at least recklessness. It was less irresponsible than the Eisenhower Administration in the former example, because there was only a limited danger of Soviet retaliation against West Europe, and no danger of Soviet retaliation against the United States itself. On the other hand the number of bombs available in America was so small that it could be argued that their

effectiveness in any case would have been rather limited. They could be effective only insofar as their actual use or the threat of their use had a great psychological impact. A third possible example was the behaviour of both Russia and America during different stages of the Cuban crisis in 1962.

Thus apart from the strategic problems involved in the creation of a stable balance of nuclear deterrence between Israel and Egypt, given a model of Israel and Egypt acting in isolation from the rest of the Middle East sub-system, structural pressures exist in the area which would make it difficult for Arab leaders, and thereby for Israeli leaders, to behave in a manner which would increase nuclear stability. Indeed, it would be difficult for the super power^s leaders to behave rationally or responsibly if they were to be put in the same conditions. The real problem in the Middle East context therefore is not the presumed 'inherent' difference between more responsible and less responsible leaders, but between different structural situations, and also between the levels of the ferocity of the conflict.

This argument about the systemic pressures could be elaborated in the following way: there are special characteristics of the relations in the Arab world, which it is reasonable to assume, will lead to a certain structure of relations inside a possible future Arab military alliance under the hegemony of Egypt. First, the level of military and political integration would be relatively low. To achieve a high degree of such integration presupposes a level of social sophistication which is completely

lacking in the Arab world. Second, attempts to compete against the 'bloc leader' namely Egypt would continue and the level of military and political control exercised by Egypt would be very low. Third, there would be no ideological coherence inside the alliance. In the Arab world, states keep changing their ideological orientations, but the real differences run along 'Real politik' lines, which are then ascribed to ideological differences. One example is the differences between 'Ba'ath socialism' and 'Nasserite socialism', differences which have been advanced to explain the very real political conflict between Egypt and Syria. But this conflict sprang from political competition which had nothing to do with ideological differences. On the other hand, ideological differences became less important when the real political interests demanded some sort of co-operation. Thus, after the Six Day War, Egypt and Jordan became close to each other because of their common interests. Indeed, if the Arab countries do have stronger though shifting relations with either of the super powers, it is as much to secure guarantees from their super power ally against local enemies as against the other super power. . Fourth, in the Arab world the declared ideological objective is ultimately a political unity. However, most if not all the Arab leaderships, while adhering to this objective, opposed it in practice when it meant that another Arab state would take control of the united Arab super-state. Indeed even the Egyptian leadership was sometimes doubtful about such a prospect, because of the obvious tensions which would be caused by it. An Egyptian nuclear guarantee to

other Arab countries, combined with the declared policy of Arab unity, and the actual fear and opposition of the Arab allies to this idea of unity under Egyptian hegemony, would create enormous tensions within the alliance. It would strengthen motivations on the part of the Arab allies to do away altogether both with the Israeli threat and the Egyptian patronage, a motivation which could lead to the fomenting of a war provoked by one of the allies.

Geographical proximity is yet another destabilising systemic factor. It could be speculated that, had the super powers had common borders, their ability to manage their crises without resort to full scale conventional war which might have deteriorated into nuclear war, would have been limited. The existence of a European frontier removed from their own frontiers and perhaps more importantly, the existence of 'grey areas' in Asia and Africa, enabled the super powers to avoid direct military confrontation and to develop (mainly on the American side but to a limited extent on the Soviet side as well), doctrines of limited conventional wars. These doctrines supplied the two sides with - at least - the intellectual instruments to deal with the exigencies of nuclear diplomacy without an unavoidable escalation into nuclear war.

In the Israeli-Egyptian case there has not developed any real common understanding as to the way in which war will be conducted. There were some instances of limited tacit understandings in this field, but the general rule was rather the contrary, namely the lack of a comprehensive

understanding on these issues. The main limiting factor on the Israeli side related to the political objectives, and also the notion that Israel should not cross the Suez Canal (a position held both in 1956 and in 1967-1970). However, Israel's 'deep penetration' strategic bombing of Egypt during the first months of 1970 showed that Israel also had not realised the full significance of the concept of "limited war".

In the past, actual limited action along the borders between Israel and Egypt led to full scale war⁽¹⁾. What is as important within this context of 'limited war' or the lack of it, is that the two sides have not yet succeeded in formulating their basic national interests in such a way as to accept a tacit recognition from the other side that these interests would not be encroached upon. Thus the main problem for the two sides under conditions of nuclear proliferation would be to reformulate national interests and to improve communication. This might happen in due course, but until the process has reached some degree of maturity (and the process must be a continuous one), the dangers of misunderstanding about the limits to which one could go, would be there.

That the two sides have common borders, that they are at present in a period of actual war and that most

(1) Thus in 1955-1956 infiltration and retaliation led to war; in 1967 infiltration and retaliation were conducted between Israel and Syria and Jordan and not Egypt. But Israeli retaliation against these countries was considered by the Arabs as a symbolic action against Egypt.

channels of communication between them are closed, certainly is not conducive to the working out of the necessary preconditions for a stable balance of nuclear deterrence. Under such conditions it seems likely that instead of stabilising the situation, nuclear weapons would only create enormous dangers. The conclusion again is that the introduction of nuclear weapons will further destabilise Israeli-Egyptian relations, unless there is prior to it a period of relative calm in the relations between the two countries.

The Super Powers Role and the Question of Guarantees

Another extremely important factor is the probability of guarantees, or intervention by the super powers in case of the introduction of nuclear weapons into the Middle East. It is extremely difficult to predict anything with any measure of accuracy here as the development depends on so many imponderables. One can only describe some possible trends and the alternative scenarios which may develop. It is important however, to note from the start that the situation may have changed in a significant way since the beginning of the Soviet direct military involvement in Egypt during the first months of 1970. This direct involvement signifies a growing commitment which may withstand great pressures (on the Soviet Union at least), to withdraw from the Middle East sub-system in case of proliferation, a possibility which will be dealt with below as one of the scenarios.

The imponderables affecting the future behaviour of the super powers in this context, are to be found in different contexts: the future of the bipolar system in general, namely the future of the particular level of direct relations between the super powers in the global international system; the interests of the super powers in the Middle East itself and the extent to which there is any symmetry between their objectives in this area; the attitudes of both super powers to problems of nuclear proliferation and the extent to which general proliferation will take place.

The following is a scheme of different possible structures of relationship between the super powers in case of proliferation in the Middle East. These will include in the first place a general account of the possibilities of the development of the bipolar system:

Different types of bipolarity

(a) Bipolarity which will take the form of a full and comprehensive joint policy of the super powers in different sub-systems of the global international system and hence the Middle East as well. This could come both before nuclear proliferation took place in general or in the Middle East in particular. The super powers will assume some sort of condominium over parts of the world inclusive of the Middle East, or alternatively credible joint guarantees against the use of force in general or against nuclear threats or the use of them in particular.

(b) Revitalisation of competitive bipolarity strictly in the Middle East. This could come as a result of a tacit decision by the super powers to divide this region into very clear spheres of influence within which the super powers enjoyed great control, each within its own sphere of influence. This could come about either as part of a general revitalisation of bipolarity leading to tight bipolarity in which the whole global international system or the greatest part of it were divided between the two super powers. In such circumstances, the division of the Middle East would mean a greater dependence of developments inside this region on developments in the general bipolar system. The role of the local actors would become more limited.

Both these possibilities, condominium in the Middle East and its division into spheres of influence, could theoretically come as independent developments and not necessarily as part of the general revitalisation of bipolarity in the global international system. However, at least the variant of 'condominium' appears to be dependent to a large extent on the change of relations between the super powers towards policies undertaken much more in common in the global international system. The variant of joint guarantees is less dependent on such a general global development.

The possible variants therefore are: Bipolarity in the sense of 'condominium' in the whole global international system inclusive of the Middle East; Bipolarity in the 'condominium' sense in only parts of the world but inclusive

of the Middle East; Bipolarity in most of the global international system but exclusive of the Middle East in which a different kind of relationship will govern the super powers relationship in this region. The same variants could be applied to the second type of bipolarity (competitive bipolarity): division of the whole of the global international system into two big military alliances, and hence a division of the Middle East into two parts belonging to the two alliances (in which case the Arab-Israeli conflict would become much less important, and dependence on super powers would become the overwhelming consideration of the local actors); competitive bipolarity in only parts of the international system but inclusive of the Middle East; competitive bipolarity in most parts of the world but exclusive of the Middle East. It could be added that under conditions of 'competitive bipolarity' there might be a tendency to include most - if not all - the sub-systems in the bipolar system. As the extreme form of competitive bipolarity (which could be described as 'tight bipolarity'⁽¹⁾) has never really existed, this observation about its all-encompassing totality is based on the assumption that in this particular system of relationship between the super powers, the military component would become much more applicable than in the present day systems. Nuclear weapons, or at least the threat of them, could be

(1) This concept has been suggested by Morton Kaplan in System and Process in International Politics, New York, 1957.

used more freely in order to intimidate third powers to join either alliance, or conversely, the threat of nuclear blackmail by one super power would force third powers to join the other super power's alliance.

(c) On the other side of the spectrum of relationships between the super powers is the general possibility of a complete fragmentation of the international system. This could have several different manifestations. One possible example is the complete withdrawal of the super powers from alliances and commitments in the international system. Isolationism would become the rule in both super powers and the big military alliances would disintegrate. One result could be the emergence of some big powers which would try to take over the role of super powers or, alternatively, the role of those powers which stand at the top of a new hierarchy of the international system. This possibility signifies some sort of an effort to recreate the role of a super power and/or new world powers. This possibility, isolationism on the part of the 'old' super powers, and the emergence of new ones appears to be very improbable in the foreseeable future. Another variant of the possible complete fragmentation of the international system, is isolationism on the part of the super powers coupled with fragmentation of the international system along the lines of regional sub-systems, with no big powers trying to attain the role of super power or world power. Big powers even while creating substantial nuclear second strike capabilities, would limit themselves to their immediate sub-systems. The

big alliances would fragment, but no other new powers or world alliances would emerge instead.

A complete fragmentation of the international system would not mean necessarily that the Middle East sub-system would become completely independent. If it did become completely independent from outside great-power intervention (and in this scenario these big powers would not include the super powers in any case), then the internal military component of the local powers would become much more important and relevant to political power and influence. Thus a nuclear Israel and a nuclear Egypt could play the role of local 'super powers'. There might be however, another possibility, namely that the Middle East sub-system would become either a part of another sub-system, for example a Mediterranean sub-system, or a new sub-system composed of both Middle East and the Balkans (which was the case until the First World War), and in that case the erstwhile Middle Eastern powers proper would be less important militarily and politically. Another possible development in the Middle East in circumstances of extreme fragmentation of the international system, will be that the super powers would retreat from the Middle East, but some medium powers (or in a different nomenclature: big powers) would become involved as outside powers in the region. These new outside powers, if acting in a fragmented international system, would be more free to use their military power as they would be freer of the restraints imposed by the central balance of deterrence existing today.

(d) In between these three general possibilities there are several more which are generally marked by some measure of bipolarity on one level, while at the same time a readiness on the part of the super powers to accept a fragmented international system on various other levels. One scenario is that of the super powers reaching a gradual revival of bipolarity (in the sense of joint policies) in the field of arms control along with a limited measure of détente in Europe plus withdrawal from other parts of the world, or most of the other parts. This is a mixture of fragmentation of the international system; common policy on problems of arms control as far as they relate to the super powers own strategic weapons; and continuation of the division of Europe into the big military alliances but with a measure of détente.

Another scenario within this general possibility is the development of multipolarity in some sub-systems (in such a case America; Russia and China would be the poles of power) whereas both super powers would withdraw from other sub-systems, and would maintain either competitive or cooperative bipolarity in their direct relationship (on the level of strategic arms for example). In all these scenarios there is no clear indication of how the super powers would conduct their relationship inside the Middle East. They could agree jointly to withdraw from it or alternatively to include it in their sphere of limited competition within the general framework of détente and competition. What could however, be generally assumed, is that in case of a limited fragmentation of the international

system, the interest of the super powers in the Middle East would always be secondary to their commitment to Europe, and in the case of America it would be secondary also to its interests in Latin America and possibly in parts of the Pacific Ocean and East Asia.

In very general terms, it could be argued that some types of super-power relationship in the Middle East, would make nuclear proliferation in this region very unlikely. Thus for instance, a 'condominium' policy implies the resolution of the Arab-Israeli conflict (or at least its freezing), and also a general agreement about arms control in the Arab-Israeli region. It appears reasonable to assume in these circumstances both that the motivation on the part of the local actors to 'go nuclear' would diminish and also that the super-powers would intervene jointly against any move in this direction. Again, in circumstances of revitalised 'cold war' bipolarity, in which the Middle East is completely divided between the super powers into two military alliances, each under the strict control of one super power, there is a high probability that nuclear proliferation would not take place. In this case it would fail to occur not because of the fading away of the Israeli-Arab conflict, but because the super powers would have much greater control over their local allies or clients, and would impose their anti-proliferation policy on these clients. Nuclear proliferation in a Middle East which is divided along 'tight bipolarity' lines is destabilising for the 'central balance of deterrence'.

It would appear therefore that nuclear proliferation in the Middle East could take place - as far as the super powers are concerned - only under conditions of a looser relationship between the super powers in the Middle East which would mean also the relative or absolute lack of control over the local powers.

It could be argued therefore that once nuclear proliferation took place in the Israeli-Egyptian region, in the sense that the two local powers 'went nuclear', the super powers will have either to impose one of the two types of bipolarity or to withdraw from the region, or still else to withdraw in a limited way, namely to restrict their involvement to certain spheres of political activity.⁽¹⁾

The super powers have different sets of interests in the Middle East: economic investments; traditional commitments to allies, ambitions for influence in the littoral states of the Mediterranean, or the negative interest of not allowing the other super power to expand its influence in the same area, etc. Their attitude towards the Arab-Israeli region is therefore decided on the basis of more than the logic or 'rules of behaviour' of nuclear strategy and diplomacy. Thus their decisions of whether to remain involved in the Middle East once nuclear proliferation took place there would not be exclusively determined by their assessment of effect of proliferation on their mutual strategic relations. The existence of different sets of considerations complicate any

(1) On the different effects on the super powers of symmetrical or asymmetrical proliferation, see Chapter 1, pp. 65-67. This Chapter discusses only the effects of 'symmetrical' proliferation.

prediction about their likely behaviour. However, even bearing in mind all these qualifications, it appears safe to assume that if indeed proliferation took place in the Middle East (namely that Israel and Egypt 'went nuclear') then to a large extent the super powers would decide upon their future involvement in the area in the light of the possible effects that proliferation would have on their mutual relations.

What could these possible effects be? It would appear that the new nuclear powers could not in any way threaten directly one of the super powers. Neither Israel nor Egypt would even remotely have the capacity to attack the super powers with their nuclear weapons. This, coupled with the various detection and intelligence systems available at present to the super powers, would make the possibility of a catalytic war provoked by one of the local powers remote. (Indeed the whole notion of catalytic war as a possibility in case of proliferation could be discounted, because of developments in detection and intelligence systems). Without the capability of developing even a 'minimal deterrent' force against one of the super powers, or the ability to provoke a catalytic war, the nuclear weapons in the hands of Israel and Egypt could not affect directly the stability of the central balance of deterrence. They could however destabilise the local balance in the Middle East itself. They could for instance be used in order to achieve a 'quick solution' to the conflict before the super powers could intervene to stop a

local escalation. Such an attempt, or even the threat of such a move, while the super powers were still involved in the area, might necessitate an intervention by the super powers, that same intervention which they have been trying incessantly to avoid. Indeed the local powers have tried already in the past to involve the super powers in their local conflict, each local power trying to involve its friendly super power on its side, and they did so while armed with conventional weapons. (Here there was a difference between Israel and Egypt. Egypt being the losing power in her military confrontation with Israel, was the first to try and involve the Soviet Union on her side. Israel appealed for United States aid only in order to deter the Soviet Union from becoming directly involved. However, it would appear that had Israel been in the role of the losing side, it would have appealed on her part to the United States to help her. Whether such a help would be forthcoming, as indeed eventually Soviet help became partly available for Egypt is open to conjecture.) Thus the introduction of nuclear weapons would not change this propensity of the local powers to try to involve the super powers in their local conflict whenever they were put at a disadvantage. As has been pointed above, the local powers cannot start a process of catalytic war in the original sense of the word, namely by direct nuclear attack of the super powers in order to start a world conflagration. Thus the danger for the stability of the super-power relationship lies not in a qualitative change of the relations between local actors and super powers as a result of the introduction of nuclear weapons into the Middle East, but

in the introduction of a further destabilising element on the local level where at the same time super powers' guarantees are involved. After all, even if one super power extends guarantees to a local nuclear power and the latter is attacked by its local nuclear opponent, this does not necessarily mean that the guarantor must use nuclear weapons to defend its ally and the same applies to the use of nuclear threats. The super-power could use conventional weapons or the threat of them. The danger is not that nuclear proliferation coupled with super powers guarantees to local powers might necessarily and in contradistinction to a similar situation but without nuclear proliferation, bring about the use of nuclear weapons by the super powers. The danger is rather in the added element of instability on the local level on the one hand and in the need for the super powers to devise plans to deter the possibility of a surprise nuclear strike by one local power against the other. This is very difficult to achieve unless the super powers actually control the nuclear weapons of their allies or clients.

It could therefore be assumed that the super powers will not be inclined to extend guarantees once nuclear proliferation took place in both Israel and Egypt. But there might be other situations; for example if only one local power 'went nuclear', or if some sort of super power involvement had taken place already, after which the local power 'went nuclear'. Here the super power finds itself already deeply involved while its ally 'goes nuclear' or conversely the other adverse local power 'goes nuclear' or yet still while both of them 'go nuclear'.

The super powers can devise policies in order to avoid those effects of proliferation in the Middle East, which might destabilise their own strategic relationship. They could impose one of the two types of bipolarity. Failing that, they could also reach a tacit understanding according to which they keep their presence in the Arab-Israeli region, but would retreat from it once the local powers were becoming involved in a military conflict which appeared to escalate into nuclear threats or the actual use of nuclear weapons. Such a crisis management mechanism has its own inherent ambiguities. It would probably enable the super powers to extricate themselves from a dangerous situation. It would not however erase the anxieties and suspicions of the local powers.

Another alternative outcome of nuclear proliferation into the Israeli-Egyptian region, might be a decision on the part of the super powers to minimise their commitments and interests in this particular region, while maintaining their positions in the rest of the Middle East. The success of such a policy depends partly on the readiness of the other Arab countries belonging to the core area of the Middle East, to disengage themselves from direct participation in the Arab-Israeli conflict. Such a disengagement is a remote hypothetical possibility, which might come about as a result of the combination of nuclear proliferation, coupled with the tremendous tensions inside the Arab world. However, the other possibility which was mentioned above, namely that the Arab countries neighbouring Israel will join a military alliance with Egypt as a result

of proliferation, would make a super-power inclination to disengage just from Israel and Egypt and retain interests in other Middle Eastern countries, more difficult. This would be possible only if the whole of the 'core area' of the Middle East were left alone. This, incidentally, would still leave all the oil-producing countries in the Middle East, outside the area from which the super powers had disengaged.

A Short Comment on the Present Situation

It would have seemed inconceivable until the middle of 1970 that the super powers would either allow themselves to become more embroiled in a situation which might bring about an international confrontation or to allow one of them to pursue a policy which would at the same time enable it to reap the advantages of being involved and the ability to get away once the conflict became more dangerous. In other words they both sought symmetry in their positions and their relationship with each other and with the local powers.

This symmetry might have been affected by the growing direct physical involvement of the Soviet Union in Egypt, beginning in February 1970. It is still too early at the time of writing to assess the consequences of this involvement within the context under discussion. It certainly showed a growing Soviet commitment to Egypt and to a certain political regime in Egypt. It also raised

the question of the symmetry of commitments between the two super powers in the Middle East. This second question is open to different answers. On the one hand, as long as the Soviet involvement assumed only a defensive posture and as long as there was no direct military need for the United States to come to the aid of Israel, the possibility of symmetry still existed. On the other hand, the recent tendency towards a more limited global role in the United States coupled with the problem of American intentions in case of further Russian involvement in intermediate situations short of general offensive against Israel, created at least the image of a possible asymmetry. However, there is not yet a clear answer to these questions, and most probably the decision-makers of either super power are unclear in their own minds about the form of their country's relationship in the Middle East.

One point appears however to be clear. It seems now quite inconceivable for the Egyptian leadership to decide on building a nuclear capability against the wishes of the Soviet Union. Although Egypt is still a free agent in many respects, it would seem improbable that the Russians would allow Egypt to build a nuclear capability against their will. But in an indirect way, the recent Russian involvement affects Israel in the same manner. Once Russian military units are stationed in Egypt, Israel has much more limited military options. Israel decided not to continue her 'deep penetration' bombing inside Egypt, and pari passu this would apply also to any strategy (and

the weapons needed for it), which is aimed at the destruction of the centres of Egyptian population or of any other major target inside Egypt. Any strategic bombing of the heart of Egypt - with conventional or nuclear bombs - would mean at present an attack on Russian units, and the possible Russian retaliation. Thus, the growing Russian involvement in Egypt would mean an added obstacle on the usefulness of an Israeli nuclear bomb. Moreover, the image of the Russians as guarantors of the UAR, might imply a Soviet guarantee against an Israeli nuclear threat - apart from the limitation on its actual use. Thus, one of the possible effects of the Soviet growing presence in Egypt is the creation of an added measure against proliferation in both Israel and Egypt.

Conclusions

Any discussion of the effects of nuclear proliferation on the structure of the international system, could benefit by drawing distinctions between the global international system, the bipolar system, and the various regional sub-systems. The effects might be different for each of these.

The proliferation of nuclear options which came through the proliferation of nuclear technology, has already had multi-dimensional effects on the bipolar system on the one hand and on local conflicts within sub-systems on the other. In the first case it has both stabilising and destabilising effects. In the second case it has not as yet destabilised relations in any profound manner, but created a potential for future instability.

Nuclear proliferation itself will probably again have different effects on these two levels of the international system. The super powers have succeeded in developing mechanisms which could enable them to disengage themselves from sub-systems into which nuclear weapons have proliferated. In case of symmetrical proliferation in sub-systems, this would be more likely to be the case, and as a result the destabilising effects on the bipolar system would be much more limited. In asymmetrical proliferation, on the other hand, there are dangers of destabilisation of the bipolar system.

Apart from the effects on local conflicts inside sub-systems, nuclear proliferation might also change in different ways the structure of a sub-system, as it will affect relations

even among local actors in the sub-system which are not 'going nuclear' and which are not parties to a local conflict.

In the Middle East sub-system itself, symmetrical proliferation of nuclear weapons would probably have some destabilising effects on the Arab-Israeli region because of three sets of factors: (a) strategic considerations. (These are drawn as an analogy to the nuclear relations between the super powers, and hence the conclusion depends on the validity of such an analogy.) These considerations are involved in problems like the creation of a second strike capability; motivations for a nuclear arms race and the creation of mutual images of one's opponents' motivations for first strike. (b) the ferocity of the Arab Israeli conflict as it stands at present; (c) the systemic pressures resulting from the political configuration of the Middle East sub-system. In any case one of the main factors deciding whether proliferation did occur in the Middle East; and whether it was symmetrical or not, is the structure of super-power relationship in the future.

Nuclear options have been used in the past, are presently being used, and will probably be used in the future in order to secure diplomatic and strategic advantages. They will be used vis-à-vis different categories of powers and in different ways. In the Israeli case these uses were conducted both vis-à-vis the super powers, especially the United States; and vis-à-vis the Arab countries, primarily Egypt. The main uses, to the extent that information is available, appear to be concerned with attempts to increase security either by supplies

of more conventional weapons from America or by, tacitly, using it as another factor in search for military guarantees. There are indirect indications that some Israeli decision makers hoped to use the option vis-à-vis the Arab countries in order either to achieve a change in the basic pattern of the conflict, or to add another deterrent to a possible Arab attack. Both these uses - if they were sought - appear to have failed. Another use was to deter Egypt from trying to 'go nuclear' herself. Egypt herself was not capable of doing it in any case, but it is probable that this particular use of the Israeli option could be potentially fruitful.

Although there have been some indirect indications that some Israeli decision makers considered that the option, or a future actual weapon, could be used for compellence purposes as well, it still appears that the building of the option should be considered primarily within the framework of the deterrence posture that Israel adopted from after the Sinai campaign of 1956 onwards and specially since the beginning of the Eshkol government.

It appears that it was the Eshkol government which changed the policy of Israel on questions of arms control as related to the nuclear option, by making this position less ambiguous and at the same time being more ready to use the option for bargaining purposes.

The country most affected by the Israeli nuclear developments was Egypt, in the sense that it had always been the main military power among the Arabs, and the one that had

most to fear from an Israeli nuclear bomb. This fear however, was not sufficient to induce Egypt to abandon her role in inter-Arab conflicts and to concentrate on either of two policies: either to come to some peace agreement with Israel or at least to abandon the anti-Israel policy (which she had adopted at least as a long range foreign policy objective); or else to retreat from the Yemen and mend, as far as possible, her relations with the other Arab states so as to be ready to start a preventive war against Israel.

The development of the Israeli option appears to have contributed to the Egyptian motivations to accelerate the conventional arms race. This is the probable conclusion from their effort in developing missiles, if indeed they did so - as according to some sources they did - after they learnt about the Israeli nuclear developments, and second from their notion of the need for preparing for a possible conventional preventive war in order to forstall Israel from 'going nuclear'.

Although there was not any basic change in the Egyptian strategy or in the three basic prerequisites (according to Egypt) for a successful campaign against Israel, there emerged the concept of 'preventive war'. It seems that it was created more with the aim of deterring Israel from 'going nuclear' than as an actual strategy, but, needless to say, once a concept has been suggested, it is usually followed by some military build up or a new military doctrine.

The war of 1967 was the result of many complex reasons of which the Israeli nuclear development was hardly one.

The war was not a preventive war within the context of the reactions of states to opponents producing nuclear options. Thus the theoretical point about preventive wars as a result of the proliferation of nuclear technology was not proven, though it was not refuted either. It was not refuted first because future situations could bring about different reactions. Second, because it may be that Egypt felt more secure about the Israeli nuclear development, as a result of American and Russian assurances and of the Israeli new policy,⁽¹⁾ and hence felt no immediate need for preventive war on this particular issue. It may still, so the argument might go, revert to this course of action if she knew for sure that Israel was about to develop the bomb. // The effects of nuclear proliferation, and the proliferation of nuclear options, should be adjudged within the context of each sub-system. In the case of the Middle East, the proliferation of nuclear technology added another dimension to the relationship of Israel and Egypt on the one hand, and between the local and the super powers on the other. While the development of the options by the local powers was used both to bring pressure to bear on each other and on the super powers, changes in the super power relationship in the sub-system is an important factor in defining the limits of these uses of the options.

(1) This new policy was formulated in the declaration that "Israel will not be the first to introduce nuclear weapons into the Middle East".

BibliographyBOOKS

- Aron, Raymond Peace and War: A Theory of International Relations, New York, 1966
- Aron, Raymond Le Grand Débat, Paris, 1963
- Allon, Yigal Kasach Shel Chol (Hebrew) Tel Aviv, 2nd edition 1960
- Barnaby, C. F. (ed.) Preventing the Spread of Nuclear Weapons, Pugwash Monograph I, London, 1969
- Baufre, Andre Strategy of Action, London, 1969
- Bar-Yaacov, Nissim The Israeli-Syrian Armistice, Jerusalem, 1967
- Bar Zohar, Michael Greshet Al Hayam Hatichem (Hebrew) Tel Aviv, 1965
- Bar Zohar, Michael The Armed Prophet, Barker, London, 1967
- Bar Zohar, Michael Toldot Hatzanchanim, (Hebrew) Tel Aviv, 1968
- Beaton, Leonard & Maddox, John The Spread of Nuclear Weapons, London, 1962
- Beaton, Leonard Must the Bomb Spread? London, 1965
- Ben Gurion, David Medhinat Israel Hamitchadesh, (Hebrew), 2 vols. Tel Aviv, 1969
- Ber, Israel Bitchon Israel-Etmol, Hayom, Machar, (Hebrew), Tel-Aviv, 1966
- Boulding, Kenneth Conflict and Defense, New York, 1962
- Brecher, Michael India and World Politics, Oxford University Press, 1968
- Brecher, Michael The New States of Asia, Oxford University Press, 1963
- Brines, Russel The Indo-Pakistan Conflict, Pall Mall Press, 1968
- Buchan, Alastair (ed.) A World of Nuclear Powers? Prentice Hall, 1966
- Bull, Hedley The Control of the Arms Race, New York London, 1961, 2nd Ed. 1965
- Burns, E. L. M. Between Arab and Israeli, Harrap, London, 1962
- Campbell, John C. Defence of the Middle East, revised edition, Praeger, 1960
- Childers, Erskine The Road to Suez, London, 1962

- Churchill, Winston & Randolph The Six Day War, London, 1967
- Clements, Walter C. The Arms Race and Sino-Soviet Relations
Hoover Institute Publications, 1968
- Crabb, C. V. The Elephants and the Grass, Praeger, 1965
- Dayan, Moshe Diary of the Sinai Campaign, Weidenfeld
and Nicolson, London, 1966
- Deutsch, Karl The Nerves of Government, Glenco, Illinois,
1963
- Dutt, S. Som India and the Bomb, Adelphi Paper no.30,
Institute of Strategic Studies, London,
1966
- Edwards, David V. Arms Control in International Politics,
Holt, Reinhart & Winston, 1969
- Gabbay, R. G. E. A Political Study of the Arab-Jewish
Conflict, Geneva, Librairie E. Droz, 1959
- Gallois, Pierre The Balance of Terror: Strategy for the
Nuclear Age, New York, 1961
- Gilboa, Moshe A. Shesh Shanim, Shisha Yamim, (Hebrew),
2nd ed., March 1969
- Green, P. Deadly Logic, Ohio State University Press,
1966
- Haim, Sylvia (ed.) Arab Nationalism, Berkeley, 1962
- Halperin, H. Morton (ed.) Sino-Soviet Relations and Arms Control,
M. I. T. Press, 1967
- Harkabi, Yehoshafat Emdat Ha'aravim Besichsuch, Israel-Arab,
(Hebrew) Tel-Aviv, 1968
- Harkabi, Yehoshafat Fedayeen Action, Adelphi Paper no. 53,
Institute for Strategic Studies, 1968
- Herz J. International Relations in the Atomic Age,
New York, 1959
- Hodes, Aubrey Dialogue with Ishmael, New York, 1968
- Hoffman, Stanley Gulliver's Troubles: or the Setting of
American Foreign Policy, New York, 1968
- Holsti, K. J. International Politics: A Framework for
Analysis, Prentice Hall, 1967

- Horelick, Arnold L. & Bush, Myron Strategic Power and Soviet Foreign Policy, Chicago University Press, 1966
- Howard, Michael & Hunter, Robert Israel and the Arab World: The Crisis of 1967, Adelphi Paper no. 41, Institute for Strategic Studies, London, 1967
- Hurewitz, Jacob Colman (ed.) Soviet-American Rivalry in the Middle East, New York, 1969
- Institute for Defense Studies and Analyses Journal, No. 3, New Delhi, July 1970
- Institute for Strategic Studies The Military Balance, London (Vols. covering 1963-1970)
- Institute for Strategic Studies Sources of Conflict in the Middle East, Adelphi Paper no. 26, London, 1966
- Kaplan, Morton A. System and Process in International Politics, New York, 1957
- Kavic, Lorne J. India's Quest for Security, University of California Press, 1967
- Kerr, Malcolm The Arab Cold War, 1958-63: A Study of Ideology in Politics, 2nd ed., London, 1967
- Khan, Ayub Friends not Masters, Oxford University Press, 1969
- Kissinger, Henri Nuclear Weapons and Foreign Policy, New York, 1957
- Knorr, Klaus & Verba, Sydney The International System: Theoretical Essays, Princeton University Press, 1961
- Lall, Arthur S. Negotiating Disarmament, The Eighteen Nation Disarmament Conference: The First Two Years, 1962-64, Cornell University, 1964
- Laqueur, Walter The Road to War, 1967, Weidenfeld & Nicolson, London, 1968
- Love, Kennett Suez, The Twice Fought War, New York, 1969
- Marshal, S. L. A. Sinai Victory, New York, 1958
- Maxwell, Stephen Rationality in Deterrence, Adelphi Paper no. 50, Institute for Strategic Studies, London, 1968

- Hendel, Wolf Deterrence and Persuasion, Faber,
London, 1970
- Michaud, Michael India as a Nuclear Power, Security Studies
Papers, no.1, University of California, 1963
- Milstein, Uri Yehida IOI ve-Hazanchanim (Hebrew),
Tel-Aviv, 1968
- Morgenthau, Hans Politics Among Nations (3rd ed.) New
York, 1961
- National Planning
Association 1970 Without Arms Control, Washington, 1958
- Nakdimon, Shlomo Likrat She'at Ha'effes (Hebrew), Tel-Aviv,
1968
- Patil, R. L. M. India: Nuclear Weapons and International
Politics, Delhi, 1969
- Peres, Shimon Hashlaw Haba (Hebrew), Tel-Aviv, 1965
- Perlmutter, Amos Army and State in Israel, London, 1969
- Ra'anan, Uri Russia Arms the Third World, M. I. T.
Press, 1969
- Rapoport, Anatol Strategy and Conscience, Harper and Row
1967
- Rosecrance, Richard N. Problems of Nuclear Proliferation, Security
Studies Paper, University of California, 1966
- Rosecrance, Richard N. (ed.) The Dispersion of Nuclear Weapons, Columbia
University Press, 1964
- Rosenau, J. N. (ed.) International Politics and Foreign Policy
New York, 1961; 3rd ed. 1965
- Rothstein, Robert Alliances and Small States, Columbia
University Press, 1968
- Safran, Nadav From War to War: The Arab Israeli
Confrontation, 1948-1967, Pegasus, New York,
1969
- Safran, Nadav The United States and Israel, Harvard
University Press, 1962
- Scheinman, Lawrence Atomic Energy Policy in France Under the
Fourth Republic, Princeton University
Press, 1965

- Schelling, Thomas The Strategy of Conflict, Galaxy Books, 1963
- Schelling, Thomas Arms and Influence, Yale University Press,
1966
- Segev, Shmuel Milchama ve-Shalom Bamizrach Hatichon,
(Hebrew) Tel-Aviv, 1968
- Shah, A. B. (ed.) India's Defence and Foreign Policies, Bombay,
Manaktalas, 1966
- Shiloah Institute,
Tel-Aviv University Middle East Record 2 vols. (London, 1962
and Jerusalem, 1966)
- Smart, Ian Advanced Strategic Missiles: A Short Guide
Adelphi Paper no.63, Institute for Strategic
Studies, London, 1969
- Snyder, Glen Deterrence and Defence: Toward a Theory of
National Security, Princeton University
Press, 1961
- Stock, Ernest Israel on the Road to Sinai 1949-1956,
Cornell University Press, 1967
- Tevet, Shabtai The Guns of Tamuz London, 1969
- Thomas, Hugh The Suez Affair Weidenfeld & Nicolson,
London, 1966
- United Nations
Secretariat The United Nations and Disarmament, New
York, 1967
- United States Atomic Energy
Commission Division of
International Affairs Summary of Atomic Energy Program Abroad
August, 1965
- Vital, David The Inequality of States, Oxford University
Press, 1967
- Wentz, Walter Nuclear Proliferation Washington, 1968
- Wood, David Conflict in the Twentieth Century Adelphi
Paper no. 48, Institute for Strategic
Studies, London, 1968
- Young, Elizabeth The French Strategic Missiles Programme
Adelphi Paper no. 38, Insititute for
Strategic Studies, London, 1967
- Young, Elizabeth The Control of Proliferation: The 1968
Treaty in Hindsight and Forecast Adelphi
Paper, no.56, Institute for Strategic Studies,
London, 1969

Young, Orap

The Politics of Force Princeton University
Press, 1964

Institute for Strategic
Studies

Problems of Modern Strategy, Adelphi
Paper no. 54, London, 1969

Articles

Abramov, S. Zalman

"Denuclearizing the Arab-Israeli Region",
New Outlook, November-December, 1962

Aiken, F.

"Can We Limit the Nuclear Club?", Bulletin
of the Atomic Scientists, September, 1961

Ailleret, General D'armee

"Directed Défences", Survival, February
1968 (First published in Revue de Defense
Nationale, December 1967)

Allon, Yigal

"Hagana Peilah-Aruvat Kiyumenu" (Hebrew)
Molad, July-August, 1967

Allon, Yigal

"Habitachon Hashotf be'aspaklariat Ha'istrategia"
Ot, February, 1967

Banks, H. Michael, Groom,
A. J. R. & Oppenheim, A.N.

"Gaming and Simulation in International
Relations", Political Studies, February, 1968

Beaton, Leonard

"Why Israel does not Need the Bomb" New
Middle East, no.7, April, 1969

Beaton, Leonard

"Nuclear Fuel for All", Foreign Affairs,
July, 1967

Binder, Leonard

"The Middle East Subordinate International
System", World Politics, April, 1958

Borrow, Davis B.

"Realism about Nuclear Spread", Bulletin
of the Atomic Scientists, December, 1965

Boulding, Kenneth

"National Images and International Systems"
Journal of Conflict Resolution, June, 1959

Bowman, W. L.

"The Subordinate State System of South
Africa", International Studies Quarterly,
September, 1968

Brecher, Michael

"Ben Gurion and Sharett: Contrasting Israeli
Images of the Arabs", New Middle East, no.18,
March, 1969

Brecher, Michael

"The Middle East Subordinate System and its
Impact on Israel's Foreign Policy", Inter-
National Studies Quarterly, June 1969

- Brecher, Michael "International Relations and Asian Studies: The Subordinate State System of Asia", World Politics, January, 1963
- Brecher, Michael, Steinberg, Blema & Stein, Janica "A Framework for Research on Foreign Policy Behaviour", Journal of Conflict Resolution, March, 1969
- Brilliant, Moshe "Israel's Policy of Reprisals", Harner's March, 1956
- Buchan, Alastair "The Dilemma of India's Security", Survival, August, 1965
- Buchan, Alastair "The Security of India", World Today, May. 1965
- "The Bomb", Seminar, January, 1965
- Cygielman, Victor "Rockets now - What Next?" New Outlook, September, 1962
- Desai, J. "India and Nuclear Weapons", Disarmament and Arms Control, 1965
- Deutsch, Karl & Singer, D. J. "Multipolar Power Systems and International Stability" World Politics, April, 1964
- Dougherty, James E. "The Treaty and the Non-Nuclear States" Orbis, Summer, 1967
- Erasmus "Polycentrism and Proliferation", Survey, January, 1966
- Evron, Yair "The Soviet Union in Egypt" New Middle East, June, 1970; reprinted in Survival, August 1970
- Evron, Yair "French Arms Policy in the Middle East", World Today, February, 1970
- Firmage, Edwin Brown "The Treaty on the Non-Proliferation of Nuclear Weapons", American Journal of International Law, October, 1969
- Flapan, Simcha "For an Atom Bomb Free Middle East", New Outlook, May, 1962
- Gesteiger, Kurt "Nuclear Prospects and Foreign Policy" Survey, January, 1966

- Gopal, S. "The Choice", Seminar, August, 1967
- Gupta, Sisia "The Problem of India's Defence", Seminar, July, 1966
- Halperin, Morton H. "Halting the Spread of Nuclear Weapons", in Evan Luard (ed.) First Steps to Disarmament, London, 1965
- Hanrieder, Wolfram "The International System: Bipolar or Multibloc", Journal of Conflict Resolution, September, 1965
- Hassner, Pierre "The Nation State in the Nuclear Age", Survey, April, 1968
- Heurlin, Bertel "Nuclear Proliferation", Cooperation and Conflict, 3-4, 1967
- Hoagland, John H. & Teeple, John B. "Weapons Transfer and Regional Stability: The Middle Eastern Case", Orbis, Fall, 1965
- Horowitz, Dan "Hakavua ve-Hamitchalef bi-mediniyut Hachutz", (Hebrew) Mim Hayesod, Tel-Aviv, 1962
- Institute for Defence Studies and Analyses "A Strategy for India for a Credible Posture Against a Nuclear Adversary", 1968
- Ikle, Fred Charles "Nth Countries and Disarmament", Bulletin of the Atomic Scientists, December, 1960
- Lambeth, Benjamin S. "Nuclear Proliferation and Soviet Arms Control Policy", Orbis, Summer, 1970
- Livneh, Eliezer "Israel Must Come out for Denuclearization" New Outlook, June, 1966
- Livneh, Eliezer "There is no Absolute Weapon", New Outlook, February, 1962
- Martin, Andrew & Young, Wayland "Proliferation", Disarmament and Arms Control, 3(2), 1965
- Masters, Roger "A Multibloc Model of the International System", American Political Science Review, December, 1961
- Mendl, Wolf "French Attitudes on Disarmament", Disarmament, June, 1967; reprinted in Survival, December, 1967
- Modelski, George "International Relations and Area Studies" International Relations, April 1961

- Notzold, Eugen "Nuclear Energy in East Europe" Europa Archiv, no.21; 1967, reprinted in Survival, March, 1968
- Quester, George H. "Israel and the Non-Proliferation Treaty", Bulletin of the Atomic Scientists, June, 1969
- Rimolt, Elimelech S. "Israel's Security - Her Deterrent Forces", New Outlook, November-December, 1962
- Rosecrance, Richard N. "Bipolarity, Multipolarity and the Future", Journal of Conflict Resolution, September, 1966
- Schelling, Thomas "Signals and Feedback in the Arms Dialogue", Bulletin of the Atomic Scientists, January, 1965
- Symposium on Foreign & Defence Policy (Hebrew) Ot, September, 1966
- Trivedi, V. C. "India and Nuclear Proliferation", Disarmament, September, 1966
- Van Cleave, William R. "The Impact of Nuclear Technology on the Middle East", International Research and Technology Nuclear Journal, February, 1969
- Waltz, Kenneth "International Structure, National Force and the Balance of World Power", Journal of International Affairs, vol.21, no.2, 1967
- Waltz, Kenneth "The Stability of a Bipolar System", Daedalus, Summer, 1964
- Wielrich, Mason "Guarantees for Non-Nuclear Nations" Foreign Affairs, July, 1966
- Winson, Curtin, Jnr. "The Non-Proliferation Treaty: A Step Towards Peace", Orbis, Winter, 1967
- Wohlsteter, Albert "Illusions of Distance", Foreign Affairs, January, 1968
- Wohlsteter, Albert "The Delicate Balance of ~~Terror~~", Foreign Affairs, January, 1959
- Wohlsteter, Albert "Nuclear Sharing: NATO and the N + 1 Problem" Foreign Affairs, April, 1961

- Yost, Charles "How it Began", Foreign Affairs, January, 1968
- Young, Oram "Political Discontinuities in the International System", World Politics, April, 1968
- Zahlan, A. B. "Science in the Arab Middle East", Minerva, January, 1970
- Zartman, William I. "Africa as a Subordinate State System", International Organization, Summer, 1967
- Zoppo, Ciro Elliott "Nuclear Technology, Multipolarity and International Stability", World Politics, July, 1966

Israeli Newspapers and Periodicals

Al-Hamishmar

Banachane

Davar

Etgar

Ha'aretz

Haboker

Haolam Hazei

Hotam

Jerusalem Post

Lamerchav

Ma'ariv

TMurot

Yediot Ahronot

Indian Newspaper

The Hindu

Newspapers and Periodicals in Arab CountriesAd-DifaAkhbar al-YawmAl-AhaliAl-AhramAl-AkhbarAl-Ba'athAl-BayanAl-GaridaAl-GumhuriyahAl-HayatAl-KifahAl-ManarAl-MasaAl-MoharrerAl-MustacbalAl-Usba al-ArabiAn-NahasLa Bourse EgyptienneBritish and American NewspapersDaily ExpressDaily TelegraphGuardianNew York TimesThe Times

International PeriodicalFlight InternationalOfficial Records and DocumentsDivrey Haknesset

Parliamentary Records of Israel (Hebrew)
January 1961 - May 1967

United Nations
U. N. Secretary-General
Report, A/6353, 1967

"Report of the Secretary General on the
Effects of the Possible Use of Nuclear
Weapons and on the Security and Economic
Implications for States of the Acquisition
and Further Development of These Weapons."

Conference of the Eighteen-
Nation Committee on
Disarmament, Geneva

Records of the Plenary Sessions,
No.s 223-423

Documents of the Eighteen-Nation Committee
on Disarmament related to the Problem of
Proliferation

| | | |
|----------|----------------|----------|
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| ENDC/120 | ENDC/179 | ENDC/206 |
| ENDC/132 | ENDC/180 | ENDC/215 |
| ENDC/152 | ENDC/183 | ENDC/218 |
| ENDC/157 | ENDC/192/rev.1 | ENDC/221 |
| ENDC/158 | ENDC/193/rev.1 | ENDC/222 |
| ENDC/164 | ENDC/196 | ENDC/227 |
| ENDC/165 | ENDC/197 | ENDC/228 |

British Government

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|---------------|-------|---------------------|--------|
| Command Paper | 2353, | Miscellaneous no.12 | (1964) |
| Command Paper | 2486, | Miscellaneous no.20 | (1964) |
| Command Paper | 2595, | Miscellaneous no.8 | (1965) |
| Command Paper | 2754, | Miscellaneous no.21 | (1965) |
| Command Paper | 2776, | Miscellaneous no.22 | (1965) |
| Command Paper | 3120, | Miscellaneous no.10 | (1966) |
| Command Paper | 3346, | Miscellaneous no. 8 | (1967) |
| Command Paper | 3767, | Miscellaneous no.16 | (1968) |

Other Sources

Summary of World Broadcasts (BBC monitoring Service), Part 4,
The Middle East and Africa, October 1965 - June 1967

Unpublished Material

Quester, George H.

"India Contemplates the Bomb", 1969

This Bibliography Contains Mainly the Works Referred to in the Footnotes, and a Selection of Other Works Consulted During the Research.

Appendix I

Israel and the Atom: The Uses and Misuses of Ambiguity

(A Study of Some Policies up to 1967)

This forms a chapter in an anthology on the Arab-Israeli conflict; negotiations about its publication are currently in progress.

When at the end of 1960 the sensational news appeared in the international press that a nuclear reactor was being built in Dimona⁽¹⁾ in Israel, the general international reaction was one of scepticism, abhorrence and anxiety at the possibility of an atomic race in the Middle East; though it was coupled with admiration for the scientific and technological capability of Israel. Since then, the whole issue of 'Israel and the bomb' has occupied the minds of decision-makers in the world, becoming part of the general problem of nuclear proliferation, which in its turn has become a major area of concern in the international system.⁽²⁾ The problems arising from Israel's nuclear option are obviously complex and they serve as a nexus to a host of others. These may be approached under

(1) See inter alia, Daily Express, 16.12.1960; New York Times, 19.12.1960; The Times, 10.12.1960.

(2) The literature on nuclear proliferation keeps proliferating. Some of the obvious and by now well known works are: Alastair Buchan (ed.), A World of Nuclear Powers?, The American Assembly, Prentice Hall, 1966; Leonard Beaton and John Maddox, The Spread of Nuclear Weapons, Chatto & Windus, London, 1962; R.N. Rosecrance (ed.), The Dispersion of Nuclear Weapons, Columbia University Press, 1964; Raymond Aron, Le Grand Débat, Calman Levy, Paris, 1963; Pierre M. Gallois, The Balance of Terror: Strategy for the Nuclear Age, Boston, 1961. For the effects of proliferating on the alliance system see for example, Albert Wohlstetter, 'Nuclear Sharing: Nato and the N+1 Country', Foreign Affairs, April 1961; for a comprehensive bibliography on nuclear proliferation see Bertel Heurlin, 'Nuclear Proliferation', Cooperation and Conflict, No. 3-4, 1967.

various aspects and discussed in several contexts. To begin with, there is the general problem of nuclear proliferation, its effects on the international system and the role of Israel within this general context.⁽¹⁾ Second, there is the development of Israeli strategic doctrines

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- (1) The literature on the effects of nuclear proliferation on the international system is also growing. Most of the works mentioned in note 2 deal with this problem as well. See especially Buchan's introduction in A World of Nuclear Powers?; Stanley Hoffman, 'Nuclear Proliferation and World Politics' in Buchan op. cit.; Rosecrance's introduction and 'International Stability and Nuclear Diffusion' in Rosecrance op. cit.; Aron op. cit.; see also R.N. Rosecrance, Problems of Nuclear Proliferation, Security Studies Paper No.7, University of California, 1966; Erasmus, 'Policentrism and Proliferation', Survey, January 1966; Karl Deutch and David Singer, 'Multipolar Power Systems and International Stability', World Politics, April 1967; a short theoretical discussion is included in Morton Kaplan, System and Process in International Politics, John Wiley & Sons, 1957, where he elaborates on the model of the 'Unit Veto System'; Pierre Hassner, in the 'Nation State in the Nuclear Age', Survey, April 1968, which is devoted mainly to the present pre-proliferation phase, touches upon this subject as well; Hedley Bull The Control of the Arms Race, New York & London, 1961, 2nd edition, 1965, chapter 9; Ciro Elliott Zoppo, 'Nuclear Technology, Multipolarity, and International Stability', World Politics, July 1966; Frank Aiken, 'Can We Limit the Nuclear Club?', Bulletin of the Atomic Scientists, September 1961. On the 'small state and proliferation' see David Vital, The Inequality of States, Oxford University Press, 1967, chapter 9; Robert Rothstein, Alliances and Small States, Columbia University Press, 1968. Some of these works mention the Israeli case. A somewhat more detailed work on the Israeli contemporary position on problems of non proliferation and the Non Proliferation Treaty is included in George H. Quester, 'Israel and the Non Proliferation Treaty', Bulletin of the Atomic Scientists, June 1969; on the Israeli nuclear option see Leonard Beaton, 'Why Israel does not need the Bomb', The New Middle East, No. 7, April 1969.

and the role of the nuclear option within them.⁽¹⁾ Third, there is the context of Israel's relations with the super powers, mainly with the United States; and fourth, there is the impact of the creation of the Israeli nuclear option on the development of the Arab-Israeli conflict. The whole discussion can also be approached within the context of the strategic and diplomatic uses of the nuclear options generally and in the Middle East in particular. Finally, this discussion can throw light on the kind and pattern of images and perceptions that Israeli decision-makers and the Israeli public opinion have of both the Arab-Israeli conflict and also of the structure of the Middle East sub-system and of the international system at large. This list is not exhaustive but it indicates the central position that the 'atomic' issue holds (or should hold) in the foreign and defence policy of Israel.

This does not mean that it attracted great attention from informed public opinion in Israel-decision makers included. Nor does it signify that even its complexity has been fully appreciated within Israel.⁽²⁾ However,

(1) The only books discussing these problems with depth are Yigal Allon, Masach Shel Chol (Hebrew), second edition, 1968; Israel Ber Bitchon Israel-Etmol, Hayom, Machar, (Hebrew), 1966.

(2) The fact that Israel's nuclear policy has not been discussed fully and in depth in the public debate, was partly due to pressure applied by some official quarters who tried at a certain stage to suppress this debate. What is perhaps as serious is that it appears that no official agency had been asked to study in depth and detail and on a continuous basis, all the implications of alternative nuclear policies for Israel.

the purpose of this paper is not to discuss all the important issues involved in the problem of Israel as a potential nuclear power, or to describe at length the public debate, but to concentrate rather on two main features. First, what place did the whole idea of nuclear weapons and a nuclear option occupy in Israel's strategic doctrines and postures? This will be discussed here through a schematic categorization of Israel's basic strategic postures during the fifties and the sixties. Second, what were the diplomatic and strategic uses of Israel's nuclear option? This must include a discussion of the role of ambiguity and the resultant uncertainty in Israel's 'atomic diplomacy' vis-à-vis the Arab world.

The Concept of 'Strategy' as used in this paper

The term 'strategy' has many definitions and is open to various interpretations.⁽¹⁾ However, in this paper the term is used more or less within the context of Thomas Schelling's combined definitions or approaches. Schelling suggests a definition for strategy⁽²⁾ which

(1) For an extensive study of definitions of strategy and the 'classical' strategists' approach to the sub-discipline of strategy, see Michael Howard, 'The Classical Strategists', in Problems of Modern Strategy, Part 1, Adelphi Paper No. 54, Institute for Strategic Studies, London, 1969. A somewhat independent definition is suggested by General Baufre, Strategy of Action, Faber & Faber, London, 1969.

(2) The Strategy of Conflict, Galaxy Books, 1963.

includes the following elements, that: a) it only covers situations of conflict; b) it applies to the 'rational behaviour' of the parties to the conflict; c) it is behaviour which is directed towards winning the conflict; d) 'it is not concerned with the efficient application of force but with the exploitation of potential force' and 'it is the employment of threats and threats and promises'(1) However, in his later book "Arms and Influence" Schelling builds models of the efficient application of force in order to secure some diplomatic gains. This results in the development of the concepts of coercion and compellence. Compellence is the pressure brought to bear on an opponent in order to force him to take a course of action. Deterrence, on the other hand, is aimed at dissuading one's opponent from doing something. Because of this difference, deterrence need not involve initiating any action. The deterrer only defines the risk to the other side if action is taken. '...Compelling in contrast, usually involves initiating an action (or an irrevocable commitment to action) that can cease or become harmless only if the opponent responds.'(2)

There are two main differences between deterrence and compellence apart from those suggested above: a) compellence by its very nature tends to be more involved with

(1) Schelling, op. cit., p. 15.

(2) Arms and Influence , Yale University Press, 1966, p. 72.

violent actions, deterrence less so. Ideally, deterrence is merely an announcement (or tacit signal) of what would happen to the opponent were he to take a certain line of action. This is a common case in nuclear strategy. However, occasionally acts of violence also include elements of deterrence, especially when the other party is warned of future punishment that he is likely to incur if he continues in his behaviour. However, this qualification is not the rule. In the case of compellence, on the other hand, violent action is more probable. (Schelling suggests that compellence and deterrence expressed by violent action and especially during times of war should be defined as 'offence' and 'defence' respectively. See below). b) compellence by its very nature must be more definite than deterrence. It usually involves such questions as 'where', 'what' and 'how much' should the opponent do. As Schelling suggests: to 'Do Nothing' is simple, 'do something' ambiguous.⁽¹⁾ Therefore compellence has to be defined clearly.

While deterrence and compellence are both concerned with the threat of force, 'defence' and 'offence' are concerned with the actual use of force. However, for the purpose of this paper the terms of compellence and deterrence alone will be used, and they will cover both the threats to use force and the actual use of force which has as its objective deterrence or compellence. In the case

(1) ibid. p. 72.

of compellence an act of violence would signal as an inducement to the other side the threat to use more force.

Finally, there is the notion of coercion by threat or act. This concept implies the readiness to use force or cause pain to the other side in order to induce him to do something. But coercion is not concerned with the causing of pain and suffering as an object in itself but only as an instrument to secure diplomatic advantages.

The development of Israel's strategic postures can be categorized within the framework of deterrence, compellence and coercion. As these concepts are analytical, they suffer from the obvious limitations of all models in the social sciences, and some which are peculiar to the sub-discipline of strategy.⁽¹⁾

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- (1) Some of these limitations are spelt out in H. Green, Deadly Logic, and in Anatol Rappoport, Strategy and Conscience, Harper and Row, 1964. Their critique tend to discount the whole sub discipline of strategy, but this objective they fail to accomplish. Strategic concepts are analytical ones and hence they can serve as useful instruments for the explanation of one analytical aspect of international political reality and conflict, but not of the totality of this reality. This is something which several policy oriented strategists tend to ignore. But granting this important qualification the strategic concepts themselves are still useful as models of behaviour. Another pitfall of some policy oriented strategists, is that though they maintain that strategy is concerned with two actors' games (to put it in the language of game theory), they in fact think only in terms of one actor game. In other words, they think only in terms of what their side might do within the context of threats of violence and actual violence as methods for accomplishing political objectives, and they ignore the probability that their opponent might apply the very same methods. (The reference to game theory in this discussion does not imply that in my view 'strategy' is identical with game theory or that strategic conflicts are necessarily "two actors games").

One of the obvious limitations on Schelling's concepts is his assumption of rationality in conflict. In the real world, irrational behaviour in international conflicts is quite widespread. However, for the purpose of this paper, the discussion will still be mainly conducted within the framework of the analytical concepts of strategy mentioned, but with three main modifications:

First, most activities which fall within this definition of 'strategy' contain elements of all these analytical concepts and do not fall within exclusively any one of them. Second, the extent to which these activities succeed depend to a large extent on the images they have created in the minds of the other side. Furthermore, to some extent the reaction of the opponent determines whether a certain action or threat should be construed as deterrent, compellent or coercive one. Consequently, the way in which we describe our action (whether by terms of deterrence, compellence, etc.), neither explains the 'objective' character (in these terms) of the action, nor does it explain the way in which the other side conceives these actions. Thus the question is not whether deterrence or compellence has failed, but also whether a certain action could have been considered initially as a 'deterrent' or a 'compellent'. Thus the problem is one of communication and also of the difference of cultural contexts existing between the opponents. Third, this can be discussed only on the understanding that these strategic concepts interact with the foreign policy goals of both conflicting parties.

Thus the strategic definition is not determined only by the cultural context and images which both sides have, but also by the respective foreign policy goals. What also has to be considered is whether or not these goals complement the strategies employed.

It thus seems that, using these strategic concepts as analytical instruments, a study of Israel's foreign and defence policy could produce valuable results, especially if communication with the other side and reciprocal perceptions are also considered. This is particularly important in the case of Israel because of the widespread usage of the concept of deterrence.

Short outline of the Strategic Postures and Doctrines of Israel

After the War of Independence and since the creation of the 'armistice regime' in 1949, Israeli foreign policy formulated the principle of the acceptance of the territorial status quo within the new armistice borders. This principle made of Israel a status-quo power. The principle both stabilised the domestic debate in Israel on foreign policy and also improved her foreign relations with most parts of the world. This principle needed a complementary strategic posture aimed at strengthening the status quo and at the same time the country's defence in case of war (the famous 'second round' promised by the Arab Governments during the first half of the fifties).

The general doctrine which developed at the time was therefore based on the creation of a strong army which would be able to withstand another attack by the Arab armies. This meant that the concept of deterrence had not been fully developed and the emphasis was on preparation for war, not on either deterring a war or the employment of the army for the accomplishment of diplomatic objectives. It has been suggested that Israel during this period led the arms race⁽¹⁾. But even if this was the case (and the question of who started the arms race in the Middle East at different stages is difficult to answer, this was not an attempt at coercive diplomacy or in order to create a deterrent; it was mainly due to her need to build a reserve army and to standardise its equipment. In the early fifties, Israel concentrated rather on absorbing the great number of immigrants, the building of the economy, the development of the civil service and transforming herself from a volunteer society to a 'civil' society. The Arab problem appeared less urgent. Hopes for an eventual peace dwindled after the negotiations in Lausanne and Paris proved abortive: a failure - incidentally - for which Israel was partly to blame.⁽²⁾

However, by the middle of 1953 the situation in Israel began to change. The reasons for this were partly domestic, and partly due to the developments in the Arab world. On the domestic front there was a change of prime

(1) See on this point, Nadav Safran, From War to War: The Arab Israeli Confrontation 1948-1967, New York, 1969, pp. 157-158

(2) See Roni Gabbai, A Political Study of the Arab-Jewish Conflict, Geneva and Paris, 1959, chapters 4 & 6.

minister and a change in the leadership of the army and the defence establishment. In the Arab world, one major development occurred, namely the revolution of the 'Free Officers'. This was greeted in Israel with a mixture of rising hopes and anxieties. At the same time infiltration into Israel increased and thus the border situation became more acute. These developments were followed by a worsening in the international situation as far as Israel was concerned. America was increasingly committed to the policy of alliances within the general framework of the strategy of containment.⁽¹⁾ A strategy of containment in the Middle East meant in reality an attempt to create military alliances with the leading Arab countries.

These developments caused great concern in Israel, which was possibly exaggerated. In any case the Israeli reaction to this combination of factors was the resort to a new strategy, namely the strategy of retaliation. This strategy had its precedents in the pre-state period, but when employed by the state created a completely new situation

(1) On the general position of Israel at the time and the growing anxieties in Israel in regard to the American intentions, see Ernest Stock, Israel on the Road to Sinai, Cornell University Press, 1967. On the American policy of containment as applied to the Middle East, during the first half of the fifties, see mainly John C. Campbell, Defence of the Middle East, revised edition, Prager, 1960, Part 1. On American Israeli relations during this period see also Nadav Safran, The United States and Israel, Cambridge, Harvard University Press, 1962.

in the Arab-Israeli conflict. What is important from the point of view of this paper is not the critical question, namely to what extent were the Israeli anxieties justified, but rather the categorization of the new strategy according to the analytical concepts suggested above. The Israeli justification for retaliatory raids, was that they were aimed at forcing the Arab governments to stop the infiltration. At a later stage Israel's explanations became more coloured by the concept of deterrence.⁽¹⁾ The Israeli raids, according to these explanations, were purely deterrent actions. However, other observers saw these raids differently. According to General Burns⁽²⁾, for instance, the raids were really aimed at forcing the Arab side not just to stop the infiltration but also to accept a certain political settlement. In other words, the raids were designed to attain two alternative objectives. First to deter indirectly the Arab infiltration. Indirectly because as in the case of both Jordan throughout the period of 1953-1956, and Egypt until the middle of 1955, the infiltration was not organised by the governments. It was hoped that the Israeli raids would compel the Arab governments to stop the unorganised infiltration. Thus by a compellent act a deterrent effect would be secured. When the raids were directed at Egypt after the latter had begun to sponsor the

(1) See for example General Moshe Dayan, Yoman Ma'arechet Sinai, (Hebrew), Am Hasefer, Tel-Aviv, 1965.

(2) Lieutenant General E.L.M. Burns, Between Arab and Israeli, London, 1962.

Fedayeen campaign, they would serve directly as a deterrent. Second, the raids were aimed at compelling the Arab governments to accept certain political objectives. The most important of these was the attainment of a full and complete peace with Israel. Secondary aims were more limited, for example the opening of the Straits of Tiran or to enforce the opening of the Suez Canal for Israeli shipping.

As there has not been any detailed study of the Israeli retaliation policy between 1953-1956⁽¹⁾, most of the views in this paper are therefore based on an interpretation of existing sources. But with these qualifications one can still argue that from the information available, it appears that the Israeli strategy of retaliation contained several strategic elements. It would be valid to argue that several of the raids were aimed at accomplishing a deterrent effect, others at attaining a compellent effect, while still others were executed in order to cause pain to the other side for 'pure retaliation'. Furthermore, some raids were executed with the aim of achieving, if not all three, at

(1) For some partial studies or accounts see Burns, op. cit., Stock op. cit., Moshe Brilliant, 'Israel's Policy of Reprisals', Harper's, March 1965, pp. 68-72; Dan Horowitz, 'The Permanent and the Transitory in Foreign Policy' (Hebrew), Min Hayesod, Tel-Aviv, 1962, pp. 94-128; Kennet Love, Suez, The Twice Fought War, McGraw Hill, 1969, which deals inter alia with Israel's retaliation policy; Yair Evron, 'Mediniut Hutz Hanikba'at al Yedei Hatsava' (Hebrew), Ha'aretz, December 1965.

least two of these objectives simultaneously. There were also times when the raids were carried out without any definite objective in mind but just because of local tactical military considerations, or in order to achieve some political objectives in the international scene. It must be stated that these notions of deterrence, compellence and coercion or their popular translations were not even conceived of at the time. Even at present, the concept of deterrence is unfortunately sometimes applied to situations and actions which have in fact little in common with it. This does not mean necessarily that such strategies are bad, but merely that ex post facto official explanations in terms of these concepts are not necessarily accurate. It also means that the refinements of these concepts which have been developed in the strategic literature, were scarcely applied in practice.

It is also important to note that Israel's retaliation policy, far from deterring the Egyptians from their activities, had in fact the reverse effect. It provides in fact a good example of how a policy of deterrence, coupled with compellence and carried out by coercive means, can lead to a process of escalation. In this process of escalation, compellence and coercion become the sole strategies and deterrence finds no place.

After the 1956 war, in which Israel succeeded in accomplishing three main objectives, namely a free passage through the Straits of Tiran, the termination of activities of the Fedayeen and the improved credibility of the Israeli

forces as a deterrent, there ensued a period of limited calm in the Arab-Israeli region. This calm did not, however, alleviate the basic fears of the Israeli decision-makers that eventually there might be a recurrence of war. The main fear was of Egypt for she was not only the most important Arab power, with the greatest army and potential, but also a power whose declared intention was to reverse the outcome of the 1956 war. Egypt also became increasingly committed to Arab unity under its hegemony, and this again was considered extremely dangerous for Israel. Apart from these anxieties, the most important direct consideration for both sides was the accelerating arms race. Whereas between 1950 and 1955 the Israelis led the arms race, roles were thereafter reversed, and Egypt took the lead in this race.⁽¹⁾

It appears that both sides entertained mutual anxieties about each other's intentions, and the arms race supplied yet another reason for the growing fears and apprehensions. It was thus reasonable for both sides to try to create adequate strategic doctrines to deal with possible threats from the other side. One of the main fears of certain Israeli leaders (though by no means all of them), was that the Arab world, led by Egypt, would unite for another round against Israel. Although an Arab victory would have been unlikely because of the obvious differences and animosities within the Arab world, the possibility did

(1) See Nadav Safran, 'From War to War', op. cit., pp. 151-2.

influence the position taken by some decision-makers. Mr. Ben-Gurion himself, after the signing of the 1963 pact between Egypt, Syria and Iraq immediately wrote to the leaders of the Western world asking them for guarantees in the face of the growing menace arising from new Arab unity. This initiative failed for two reasons: first, the Western powers dismissed fears of Arab unity as groundless; second, they were not ready to abandon their well-established approach of withholding formal military guarantees from Israel.⁽¹⁾

Growing fears about the possibility of another Arab attack demanded that the Israeli army should be prepared for such an eventuality. It also raised the question of how to bring about a situation where future wars could be avoided altogether. The problem became increasingly one of how to deter the Arabs in general and Egypt in particular. Thus gradually a new doctrine of deterrence emerged. This time the thinking about deterrence appears to have been more fundamental than in the previous strategic postures. The new doctrine was on two levels, first the conventional, and the second on a level aiming at the eventual creation of a nuclear option. At present there is no available evidence⁽²⁾ as to the initial intentions of the Israeli

(1) On this episode see Michael Bar Zohar, The Armed Prophet, Arthur Barker Ltd., 1967, pp. 292-294.

(2) There have been several suggestions that Israel is planning to 'go nuclear' eventually but no Israeli decision maker has ever suggested that this is the case. For suggestions in the Knesset from which the implication was that Israel was planning to produce nuclear weapons see for example Toufic Toubi on 6.8.1962. Suggestions to this effect by non Israeli sources abound but were usually denied by the Israeli government. Some Israeli political commentators close to some of the decision makers have argued several times, in various articles in favour of Israel 'going nuclear'. See for example, Avraham Schweitzer, in Ha'aretz, 14.8.1962.

decision-makers when the Dimona project was planned and launched.

It appears that at the time, important differences existed between decision-makers about Israeli nuclear policy. An important debate on the problem took place in 1962, in which Alon maintained that Israel should concentrate on building up her conventional forces, and that the introduction of nuclear weapons into the Middle East would harm the interests of Israel.⁽¹⁾

This debate concluded with the acceptance of Allon's policy. Ben-Gurion, who chaired the meeting, endorsed Allon's approach about the need to concentrate on the conventional forces.

On the conventional level, however, it appears that a real change of emphasis took place at some early point in the sixties. This perhaps was due mainly to the appointment of General Rabin to the position of Chief of Staff towards the end of 1963. The growing emphasis on deterrence could be witnessed by the way in which this concept was mentioned more and more in the Knesset debates.

(1) See Moshe Gilboa, Shesh Shanin Shisha Yamin, (Hebrew), Am Oved, Tel-Aviv, second edition, 1969, pp. 29-30. Allon's position on the question of the best nuclear policy for Israel is included in 'Masach shel Chol' op. cit. and in 'Hagana Peila-Aruva Lebitchonenu', (Hebrew), Molad, July August, 1967.

The general idea being that, by creating a strong and well equipped army, the Arab countries would realise that there was no real hope of ever achieving their declared objective of the destruction of Israel. The basic dilemma here was that the deterred party might be subject to misperceptions about its ability to succeed in such a war. In other words, the deterring party must be able to communicate to the opponent the latter's inability to launch a successful war. This can presumably be accomplished by several means. First, the deterring party can quite openly communicate to the other side the massive supplies (or whatever they may be) of weapons in his arsenals. Second, proving by action, as it were, the basic inability of the opponent to succeed in its planned actions. This can be achieved for example by successful small scale clashes or skirmishes along the borders, or by starting limited escalation whenever there is some military interference from the other side: all this just to increase the credibility of the conventional deterrence posture. The dilemma involved in the last two approaches is that such measures could be interpreted by the deterred party not just as measures aimed at increasing the deterrence posture, but rather as coercive measures aimed at compelling it, or even worse, as an exercise in 'brute force'. Furthermore, Egyptian decision-makers felt, to some extent, that Egypt on her part was engaged in a deterrence exercise against Israel. This partly stemmed from Egyptian misperceptions about Israel's foreign policy objectives. References to the 'expansionist'

intentions of Israel can be readily found in Egyptian and Arab literature. Thus every action taken by Israel could have been interpreted by the Egyptians and the other Arab countries as an expansionist move which must be prevented, and deterrent actions must be taken in order to deter such future Israeli moves.

In the event of both sides becoming involved in 'active deterrence',⁽¹⁾ (as General Tzur has termed the new posture), the Israeli army assumed that escalation would be the only alternative.

The problem therefore of how to increase the credibility of deterrence without starting a process of escalation, is one of the most crucial in a situation of conventional deterrence within a context of possible limited military action. It becomes much more problematical in a situation like the Arab-Israeli conflict. Here there are several actors, and the Arabs themselves are caught by a situation of intense competition, where

(1) See interview with the then Chief of Staff, General Tsvi Tzur, in Bamachane, the Jewish New Year issue, September 1962. General Tzur suggested in this interview that the Israeli Army should move from deterrence to 'active deterrence'. The meaning of this concept had not been clarified by General Tzur, but the implication was that the army must be ready to be activated in a matter of minutes. This would mean in the first place a deterrence posture, and also a posture of permanent readiness to disarm the enemy in case deterrence failed.

one of the symbols of the competition is the separate ways by which the Arab states propose to solve the 'Palestine problem'.

The other level of the new strategy of deterrence emerging in Israel during the early sixties was the nuclear one. If indeed the objective of some Israeli decision-makers was to create the actual weapons, then the rationale for this was as follows: The Arab world may at some time unite under the leadership of the Nasser variety intent on the destruction of Israel. Such a united Arab world (or at least part of it) might be in a position to muster enough troops to overcome the hitherto conventional superiority of Israel. Furthermore, and perhaps alternatively, if a process of modernisation in the Arab world proved to be successful, even one Arab power like Egypt might be in a position to launch a successful conventional war against Israel. Moreover, the question is not just whether the attack would prove to be a success, but of what is the Arab perception of their chances. Unity in the Arab world or modernisation in the Arab world, might lead the Arabs to the assumption that they would succeed in their attack, and this even if the assumption proved to be false once put to test.

Thus the only alternative to annihilation or to war in general, would be the creation of a decisive deterrent force which would convince the other side that they could never accomplish their aims.

However, if nuclear deterrence failed then the new weapon could frustrate the conventional attack of the opponent. This could be achieved by threatening to use the weapon, once the possibility of a conventional defeat for the Israeli side arose. This objective could be attained by either the use of tactical nuclear weapons⁽¹⁾ or by threatening to use the strategic weapon against the other side's centres of population.

Alternatively, acquiring a superior weapon system, also meant the possibility of using it for compellent purposes, namely to force the other side to accept Israeli political demands. This would presumably include a demand for the acceptance of the territorial status-quo and the signing of a peace treaty with Israel.⁽²⁾

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- (1) As tactical nuclear weapons are much more sophisticated and expansive than strategic ones, the first stage in the nuclear weaponry of all the nuclear powers have always been that of strategic weapons.
- (2) For a possible reference to such an alternative see interview with Mr. Shimon Peres in Davar 28. 9. 1962. Following are the relevant question and answer:
'Question: When you have recently mentioned the need for a new approach, you have stressed the switches from the stage of defence to the stage of deterrence and from this to compellence. What is the new stage?
Answer: I would have explained it in the following way: when the types of arms in the hands of the two sides were limited, obviously the doctrine of defence had its place. The two sides had a long time to defend themselves, stop and in the last analysis, conduct a defensive war. When the new jet planes and tanks arrived, the main danger represented was of surprise attack and naturally the basic defence was to deter the enemy from attacking. But when the non conventional weapons arrived and in this stage they are mainly the missiles, the very existence of the weapons - even before they are used, might create a compellent effect on the existent situation. Obviously when we say 'compellence', we have to remember the differences between the Arabs and ourselves as far as the objectives

/continued...

All this assumed that the other side would not have similar weapons. The Israeli side would thus be left with a superior weapon system which could be used for either deterrence or compellence.

There has always been some difference of opinion among Israeli decision makers about the ability of the Arabs (in fact Egypt) to obtain the same or even superior weapon systems as Israel. It seems that one school of thought argued that in the final analysis Egypt would be in a position to get whatever Israel had succeeded in acquiring. Another school of thought tended to argue that in fact Israel could use her scientific and technological capability in such a way as to succeed in surpassing Egypt in at least some weapon systems. This argument was voiced, not necessarily in connection with the nuclear policy of the country, but also independently. What tended to create some confusion in this field, was that sometimes precisely those persons belonging to the second school of thought, argued in the public debate that whatever Israel was doing in this or other armament fields was due to

Footnote (2) continued...

of the compellence are concerned. The Arabs want to compel us to surrender and we want to compel them to make peace. The difference between types of arms changes to a certain extent the various conceptual approaches'.

(Mr. Peres referred here to the effects of missiles, but said that his analysis of the phase of 'compellence' covers non conventional weapons in general. Whether he referred to nuclear weapons in this interview, or not, is anybody's guess. What is important in this context of this paper, is simply to speculate on how possibly the alternative of 'compellence' as a use for nuclear threats could be envisaged. On this point see also Avraham Schweitzer, in 'Ha'aretz', 14.8.1962).

the need to match Egypt's development in the same field. However this kind of presentation in the public debate should not obscure the real positions of the two schools of thought. In passing, it might be noted that such switches of opinion from the public debate level to the level of decision making are well known in other states, and are legitimate in the political process.

After a time a new rationale was suggested by some political commentators as to the development of an independent nuclear deterrent in Israel. The argument this time was that if both sides acquired atomic weapons, then a situation resembling the 'balance of terror' between the two super powers, would emerge. It was argued that there was a possibility to transform the present (pre 1967) unstable situation between Israel and the Arab countries into a new situation, whereby the Arab world would be convinced that there was no hope to defeat Israel and would accept the 'rules of the game' which governed the behaviour of the two super powers. Thus a fourth alternative can be added to the rationales of an Israeli atomic weapons' programme.⁽¹⁾ (The question whether a stable balance of nuclear deterrence could develop in the

(1) See for example Shmuel Segev and Avraham Schweitzer in 'Symposium on Nuclear Policy', Hotam; Rimalt, Tmurot, September 1962; Avraham Schweitzer, Ha'aretz 14.8.1962.

Israeli-Arab area is of course one of the crucial points for debate and one in which the role of irrationality is crucial. This however is again not part of this paper.)

The mixture of deterrent and compellent elements as the objectives of an Israeli nuclear weapon, was both ambiguous and unclear. To the extent that ideas about such uses of the nuclear weapons circulated among some political observers and possibly some decision makers (as far as the latter were concerned this has not been confirmed by any published authority), this demonstrates two misperceptions about the nature of nuclear weapons. On the one hand, was the notion that atomic weapons were just a new weapon, not qualitatively different from all the conventional systems. Nuclear weapons could be used as instruments of threat and diplomatic pressure precisely like any conventional system, the only difference being that they could effect better results because of their bigger payload. That this was the notion follows from the following analysis: If one were to use nuclear weapons as a threat for compellent purposes, one would have to be prepared to witness their use. If not, their credibility as instruments of compellence would be found lacking. If this were so, an even more serious consequence could ensue, namely that the credibility of the nuclear deterrent would be found lacking. The notion that these weapons could be used as a compellent also shows another and a contrary misperception, namely that nuclear weapons are so different from other weapons that they can achieve any diplomatic and military objective.

Henry Kissinger⁽¹⁾ suggested that there are three stages of perception about the nature of nuclear weapons, which follow upon their possession. First, nuclear weapons are perceived simply as 'bigger guns'; second, they are looked upon as the ultimate weapons which can ensure completely the security of the nation, making all conventional forces obsolescent; third, a more balanced and rational approach is adopted, whereby a synthesis of nuclear and conventional forces is sought. It thus appears that unwittingly some Israelis followed Kissinger's model but with two major qualifications: (a) Kissinger referred to powers which had already gone nuclear; (b) Kissinger outlined three sequential stages of perceptions, whereas among these Israelis two of these stages occurred simultaneously.

The same misperceptions can be traced in the general Israeli approach to problems concerning nuclear weapons. Their development would have meant on the one hand that Israel disregarded their special nature as far as the reactions of the super powers were concerned. It was precisely the special nature of nuclear weapons which induced the super powers after a time to take energetic measures to halt nuclear proliferation. On the other hand, the school of thought which possibly favoured the development of such weapons in Israel, based its approach on the perception of nuclear weapons as absolute deterrent, thus

(1) See Nuclear Weapons and Foreign Policy , New York, 1957, pp. 388 ff.

admitting in a sense the special character they have, a character that would render necessary their special treatment by the super powers.

But the notion that nuclear weapons could be used as the 'absolute deterrent' is not valid in any case within the context of the Israeli-Arab conflict. This could be demonstrated by the following example: Hypothetically, if Egypt had no nuclear weapons, but Israel had, and conventional hostilities developed, the real problem would be when to use the deterrent. What if, for instance, the initial Egyptian attack was partly successful in the sense that part of Israel was overrun or just part of the Israeli army 'disarmed' (in the Clausevitzian sense). Would the use of the nuclear deterrent under such conditions be rational? Bearing this dilemma in mind, it could be argued that the possession of nuclear weapons by one side to the conflict, would not necessarily deter the use of conventional troops by the other side. Furthermore, any use of atomic weapons in the conflict would bring about an extremely strong international censure. All this adds up to the paradoxical - yet well known - conclusion that the deterrence posture of a nuclear Israel facing a non nuclear Egypt, would be only slightly improved in cases of limited conventional attacks and possibly limited Egyptian successes.

The above example is based on the assumption that deterrence has failed even though it was originally reinforced by the existence of nuclear weapons in the hands of

Israel. However, it could still be argued that a non nuclear Egypt would find it extremely dangerous to start an attack on a nuclear Israel. There is however the possibility of miscalculation.⁽¹⁾ For example: If an initial Egyptian move were performed primarily as a deterrent against Israel, as for instance the first Egyptian move in the 1967 crisis. This move might nevertheless create a new situation, in which hostilities were joined either because of an Israeli pre-emptive strike, or a limited Egyptian attack. Under such conditions, the question would really be whether a limited Egyptian conventional success would be sufficient reason for Israel to use atomic weapons. It can be argued that Israel would decide that only a danger to the very existence of the state would render rational the use of nuclear weapons. Furthermore its use in the circumstances of a limited Egyptian success might incur a reaction from the Soviet Union, a reaction which America would find it extremely difficult to oppose. This last point is obviously based on the present attitudes of the super powers towards nuclear proliferation. This scenario does not refute the value of nuclear weapons as a deterrent, but certainly shows their limitations when in the hands of Israel under conditions of limited wars.

(1) Stanley Hoffmann defines and describes 'miscalculation' in the following way: '...embroilment that comes not from a wrong calculation, but from a process beyond calculation....crises of miscalculation indicate that in a world of acute competition there are times when calculations - rational or unreasonable - become impossible.' See Hoffmann op. cit. p. 102.

These possible misperceptions about the nature of nuclear weapons were and sometimes still are, common to other nuclear or potential nuclear powers. They stem from the paradoxical situations created by the peculiar nature of nuclear weapons and the blurring of the distinctions between deterrence and defence.⁽¹⁾ To state that misperceptions exist does not necessarily mean that nuclear deterrence would not work, or that nuclear weapons in the hands of Israel would be more dangerous for her own security or for the stability of the world, than the same weapons in the hands of the super powers. What it does mean however, is that in her diplomatic relations with the super powers, Israel would have suffered considerably had she gone nuclear. Also, and perhaps even more importantly, in terms of the strategic objectives destined for nuclear weapons, Israel could have witnessed a completely different outcome than the one envisaged.

The Uses of Nuclear Options

A much more sophisticated approach is that dealing with the effects - both strategic and diplomatic - of a nuclear option. Here it is not yet clear what objectives were sought by Israel. One could however list some of those that came about as a result from actual policies and

(1) For an excellent analytical study of the distinctions between these two concerns, see Glenn H. Snyder, Deterrence and Defence : Towards a Theory of National Security , Princeton, 1961.

tactics. To begin with, one has to differentiate between the 'Arab' front and that of the super powers. Towards each of them, Israel could have pursued different aims, using the existence of a nuclear option as a strategic and diplomatic leverage. What is therefore interesting to note, is the ability (either pursued or just put forward here) to use the nuclear option as both a deterrent and a compellent.

As has been pointed out before, the concepts of deterrence and compellence are strategic in nature and therefore presumably should have been limited to this field. It seems however, that these very concepts can serve as effective tools for the analysis of diplomatic behaviour as well. Differences could arise when the concept of coercion (which has its deterrence and compellent aspects) is introduced. Here the role of diplomacy ends and violence takes over. Thus, only within the realm of diplomatic threats, can the concepts of deterrence and compellence be introduced. One could however stretch this by pointing out that at a certain level the invocation of diplomatic threats which do not escalate into violence, are similar to 'coercion' in the field of strategy. It seems however, that this would not be the case with the threat to 'go nuclear'. The threat itself can be used as both a compellent and a deterrent. But once the threat has been invoked, there is no way to use the actual nuclear weapons as a deterrent against the kinds of actions which were hoped to be deterred by the threat of 'going nuclear'. The same is applicable in part to its use as a compellent.

The real, and most significant, issue raised by the development of an Israeli nuclear option, was not the actual production of nuclear weapons, but rather the ways in which the option of producing these weapons were used. These uses are evidenced in either a clear or a tacit way and are partly based on intentional or unwitting ambiguity.

The great concern of the super powers about the dangers of nuclear proliferation, is already a well established fact in international politics. This concern is shared by Britain as a nuclear power as well. Furthermore it could be argued that neither France⁽¹⁾ and China, specially the first, is keen on nuclear proliferation. As usual in international politics, this concern of the super powers was aroused belatedly, sometime at the beginning of the sixties. But it was some time after that, that a common policy to halt proliferation was reached. By 1968 the Non Proliferation Treaty had at last been accepted by the United Nations General Assembly. The super powers had meanwhile succeeded in developing new techniques and methods which would reduce the dangers to themselves of proliferation, and had also started the process of withdrawal from various parts of the world - independently of any nuclear proliferation. These two developments could have made the need for an anti-

(1) On the French position see inter alia, Mendel Wolf, 'French Attitudes on Disarmament', Disarmament, June 1967, reprinted in Survival, December 1967

proliferation policy less pressing. However, again because of the length of time between the creation of new images to correspond with the realities of the international system, and the changes in the 'objective' reality and interests, it was probable that the super powers' joint policy against nuclear proliferation would remain high on their list of priorities for some time to come.

Both before and after the Non-Proliferation Treaty was endorsed by the United Nations, America was extremely concerned about the Dimona project in Israel, but perhaps is at present overshadowed by other pressing issues involved in the continuous crisis in the Middle East. This concern had not subsided since the Non-Proliferation Treaty. Before the Non-Proliferation Treaty had been endorsed, the two super powers were already trying to bring pressure to bear upon their allies, clients, close powers and nonaligned alike, to accept some control or inspection over centres of nuclear production in these countries. This was done with a dual objective. First, to disallow proliferation before the Non-Proliferation Treaty had been ratified. Second, in order to halt proliferation by the independent measures of the super powers in case the Non-Proliferation Treaty would not become operational after all. However, after the Non-Proliferation Treaty had been accepted by the United Nations, the aim of the super powers became to persuade the non-nuclear-weapon states to sign and ratify the Non-Proliferation Treaty. The pressure had been successful and resulted in the question becoming really: what kinds of inducement

and bribe could the super powers offer to the near-nuclear-weapon states?

In the case of Israel published evidence is negligible because of the nature of diplomatic and strategic negotiations. However it appears that the nuclear option had been used or at least could have been used for the attainment of the following alternative purposes:

(a) Within the context of possible arms control negotiations on the Middle East. Here the idea was that Israel's superiority over the Arabs in nuclear development, would enable her to demand limitations by the super powers on the supplies of conventional arms to the Arab countries. It is reasonable to assume, that the aim was to apply controls to the supplies of Soviet conventional weapons to the Arab countries, specially those weapons in which the Arabs - with the help of Russia - achieved meaningful superiority over Israel.

Israel has demanded on several occasions⁽¹⁾ precisely

(1) This demand has been formulated in the notion of 'general and complete disarmament for the Middle East'. See for example, Ben Gurion in the Knesset on 5.6.1963 (Fifth Knesset, Second Session, vol. 30, p. 1985); Eshkol and Argov on 26.6.1963 (Fifth Knesset, Second Session, vol. 33, pp. 2203-2204); Eshkol on 7.8.1963 in the Knesset. On all these occasions the call was for disarmament under mutual control and inspection, namely Arab and Israeli, but the implication was that the big powers must first stop sending arms to the Area. The role of the big powers in this context had been spelt out more clearly by Eshkol on 18.5.1966 in the Knesset when he said '... He... who really wishes to take away from the people living in the Middle East the fear of the arms race... should work for general disarmament in the Middle East, or at least limitations of armaments of all kinds, while striking a reasonable balance...'

such a control over the supplies of conventional weapons to the Middle East. This demand, coupled with Israel's refusal to negotiate separately on the imposition of controls over nuclear production, led several observers to conclude that her superiority in the field of atomic research was being used as a bargaining counter. For several years Israel maintained that she was not prepared to discuss the several proposals for controls on nuclear proliferation in the Middle East. Such a refusal ostensibly made for a very tough bargaining position, but its very extremity created great concern which in its turn was not conducive to any bargaining process. At a later stage and under the Eshkol government, a new notion was introduced, namely that 'Israel would not be the first to introduce nuclear weapons into the Middle East'.⁽¹⁾ With such a change of position on problems of arms control and disarmament, Israel did not abandon its bargaining counter, just made it both more tacit and at the same time more conducive to a process of bargaining. The fact that Israel's initiative on controlling the conventional arms race did not succeed, was not due to the limitations of the atomic option as a compellent within the context of relations with the super powers, but because of other considerations which worked against this initiative. Taking into consideration the great military victory of 1967, which

(1) This notion had been formulated by Eshkol himself in 1965. He repeated and reemphasised it in the Knesset on 18.5.1966 when he said: 'I have said before and I repeat here that Israel does not have nuclear weapons and that Israel will not be the first to introduce them into the region'.

was accomplished with conventional weapons, one could also argue the possibility that at least some Israeli decision makers were ready to do without arms control over conventional weapons in the Middle East. In any case it would appear that several Israeli decision makers were sceptical in the first place about any prospects of arms control over any type of weapons. This was partly due to the general Israeli approach to the notion of arms control and disarmament.

However the nuclear option remains as an important bargaining counter in any future arms control negotiations. It would certainly cease to be so if Israel 'went nuclear'. The nature of nuclear weapons is such, that the very fact that they have once been produced means that a critical threshold has been passed. In that sense it resembles the actual use of these weapons. Once they have been used a certain taboo has been infringed⁽¹⁾ upon and the situation has changed in a basic qualitative way.

(b) The demand for guarantees or military alliances. The information on this point is again vague and to a certain extent contradictory. The problem of guarantees is a crucial one in the foreign and defence policy of Israel. To begin with, the question is to what extent there ever was a readiness on the part of Israel to 'delegate' the guarantee of her security to a foreign power. What is certain is that

(1) On the notion of the 'nuclear taboo' see inter alia Stanley Hoffmann op. cit., p. 99. The term had been coined by Raymond Aron.

both Prime Ministers Ben-Gurion and Eshkol sought some kind of military alliance with Western powers or with Nato.⁽¹⁾ At the same time it is clear that a very strong tradition in Israel never accepted that Israel could depend, in any circumstances, on outside military guarantees. This contradiction can be partly explained in two ways: first that there was a search for alternatives and for the maximilisation of security; second, that some division of opinion always existed between the two approaches. (The war of 1967 and the crisis preceding it convinced the majority of public opinion in Israel that outside military guarantees were not credible in any case.) In the event that military guarantees could not be secured, would a political guarantee or commitment do? If the two super powers had given a joint political commitment to Israel this might have amounted to something. A joint commitment however, did not appear to be on the cards.⁽²⁾ America on the other hand had already several times indicated its strong political commitment to Israel. The real problem remained of how to turn this commitment into a tangible formal military one. This however, has not been forthcoming

(1) See for example Bar-Zohar, op. cit. pp. 182-184; 256-258; 292-294.

(2) Since the 1967 war, there have been repeated indications that the Soviet Union might consider the possibility of participating in a system of joint political guarantees to the integrity of the territorial status quo (the pre 1967 one), of all the states in the Middle East. On the possible use of the Israeli nuclear option to secure such a guarantee, see Sources of Conflict in the Middle East, Adelphi Paper No.26, Institute for Strategic Studies, London, March 1966, pp. 43-44.

because of other factors which proved to be more important than the question of the nuclear option and nuclear proliferation.

Indeed the pertinent question has been, on the one hand, the extent to which Israel was ready to use the option in order to secure strategic and diplomatic advantages and, on the other, how high on the super powers' list of priorities the problem of nuclear proliferation was; again, to what extent was America ready to extend precisely such military guarantees to near-nuclear-weapons states in general and Israel in particular. If, hypothetically, Israel was really just interested in 'going nuclear' and not in any alternative to it, then no 'give and take' game could have been developed as far as relations with America were concerned. Similarly, if America perceived the policy against nuclear proliferation as being very low on its list of priorities, no bargain, nor even a process of bargaining could have been initiated. What should be stressed is that nuclear proliferation as a problem, and the acquisition of a nuclear option as an asset, were extremely important in the relations between Israel and the United States, but at the same time were not independent of many other considerations. Under such conditions, the obvious outcome is a middle way in which no critical decision is taken on either side.

It should also be added that it is doubtful whether Israel had in the past, or for that matter in the present as well, recognised to the full, the bargaining instrument she has in the form of a nuclear option.

To be ready to use the option entails a decision not to 'go nuclear' and at the same time ability to make a decision as to what quid-pro-quo is required in general or at any particular time. In the changing circumstances of the 1970's, after the war of 1967 and with the growing realisation of the possibility of American withdrawal from parts of the world, the ability to secure formal American military guarantees for Israel seems to be less probable. At the same time the interest of the super powers in the success of the Non-Proliferation Treaty have been maintained and their fear of nuclear proliferation in the volatile Middle East, must also have become more evident. An American military guarantee to Israel might mean international confrontation, in case local deterrence between Egypt and Israel failed and Russia had extended similar military guarantees to Egypt. On the other hand, if America did not extend these guarantees, what else could Israel demand and accept from the United States as a quid-pro-quo for not 'going nuclear'?

The answer is of course complicated. To begin with, Israel's decision to 'go or not to go nuclear' should not depend simply on the basis of its relations with the United States but in the first place on the basis of hard strategic considerations vis-à-vis the Arab world. Second, diplomatic relations with America have more than one dimension. At the present, it appears already that there are several differences of opinion between America and Israel on the question of how to solve the crisis that has engulfed the Israeli-Arab region since 1967. This is an example of

one central issue for bargaining. Furthermore America has several potential forms of pressure against Israel in other fields. The nuclear option could be used to counteract these American bargaining counters.

(c) Another use and possibly the most feasible, lies in the field of supplies of conventional arms. Both super powers have found it more convenient to supply arms rather than to give guarantees or commitments and thus run the risk of becoming directly involved on behalf of their client states or close friends in the Middle East. The Soviet Union found it the easiest way out of its Middle East debacle in 1967 when she was asked by her Arab allies either to participate in the war and save them from the Israeli army, or at least to secure the immediate return of the occupied territories. Instead of doing either, Russia concentrated on supplying vast amounts of conventional arms to her allies. Taking into consideration the gradual loss of credibility in Israel of any outside military guarantees, it appeared from the point of view of both sides, that the best way out for the United States, would be to agree to supply conventional arms to Israel of the amount and quality required. If Israel 'went nuclear' it is highly probable that America would become less ready to maintain the supply of weapons.

The discussion of guarantees should be supplemented by one further consideration, namely the readiness of the super powers under the Resolution of 19.6.1968 of the

Security Council⁽¹⁾, to come to the aid of any state, party to the Non-Proliferation Treaty attacked or threatened by

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- (1) 'Resolution of Security Assurances Adopted by the United Nations Security Council, 19.6.1968'

'The Security Council

'Noting with appreciation the desire of a large number of states to subscribe to the Treaty on the Non Proliferation of nuclear weapons, and thereby to undertake not to receive the transfer from any transferer whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly; not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices; and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices.

'Taking into consideration the concern of certain of these states that, in conjunction with their adherence to the Treaty on the non proliferation of nuclear weapons, appropriate measures be undertaken to safeguard their security,

'Bearing in mind that any aggression accompanied by the use of nuclear weapons would endanger the peace and security of all states,

'1. Recognizes that aggression with nuclear weapons or the threat of such aggression against a non-nuclear-weapon state would create a situation in which the Security Council, and above all its nuclear-weapon state permanent members, would have to act immediately in accordance with their obligations under the United Nations Charter;

'2. Welcomes the intention expressed by certain states that they will provide or support immediate assistance, in accordance with the Charter, to any non-nuclear-weapon state party to the treaty on the Non Proliferation of nuclear weapons that is a victim of an act or object of a threat of aggression in which nuclear weapons are used;

'3. Reaffirms in particular the inherent right, recognized under Article 51 of the Charter of individual and collective self-defence if an armed attack occurs against a member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security'.

nuclear weapons. It is evident that contrary to the situation of other near-nuclear-weapon states like India, Japan or Germany, Israel is not at present interested in a guarantee by the super powers or the United States, against nuclear threats or attacks. After all Israel is much more advanced in nuclear technology than Egypt, and in any case Egypt does not possess nuclear weapons. The Security Council guarantee - for what it is worth - can not therefore increase Israel's security in any way. The same observation also applies to other types of guarantees against nuclear weapons or nuclear threats, like the idea of a joint guarantee by the two super powers which some Indian decision makers had in mind.⁽¹⁾

However, the Security Council guarantee and other possible future guarantees against the use of nuclear weapons or the threat of their use, could apply adversely

(1) One example has been the indications that Shastri sought at a certain stage precisely such a guarantee. This guarantee could have taken the form of a four power guarantee (of all the nuclear powers) or of a three powers guarantee (USA, Soviet Union and Britain) or even of a super powers' guarantee. Shastri himself denied that he asked for nuclear guarantees but the press kept suggesting that. (See inter alia Daily Express , 8.1.1965; The Hindu , 21.1.1965; The Hindu , 28.1.1965; The Guardian , 8.7.1965.) Many other members of the Indian political elite thought about such a possibility, which was considered by them as the only alternative to an independent nuclear deterrent.

to Israel if she ever decided to 'go nuclear' in the future. Because of the general attitude of the nuclear powers about proliferation, it seems inconceivable that Egypt would be in a position to acquire nuclear weapons from one of the present nuclear powers, and it is not in a position to produce them by herself. Thus it appears that in the medium-range future, Israel will only face a non-nuclear Egypt. This could only change if the whole anti proliferation policy embodied in the Non-Proliferation Treaty, were to fail, and the super powers decided to let the tendencies towards proliferation continue without control. (It is still doubtful whether even in such a situation proliferation would take place on a large scale.) If this happened, it is conceivable that one of the non status quo nuclear powers might supply Egypt with nuclear weapons or with the know how and technology to produce them. In the absence of such a development, Egypt would remain a non-nuclear power for a long time and a nuclear Israel would have to reckon with the possibility that the Security Council's guarantee, or for that matter, another guarantee might be sought against her. At first sight it would seem improbable that a guarantee of this nature would be invoked in case of a successful Arab attack which led to an Israeli threat to use her nuclear weapons as a last resort. The real question however, is the definition of a 'last resort'; also a definition of which side started the war. Though the Security Council guarantee could be invoked only if the three nuclear powers - America, Russia and Britain - agreed to impose it (each of them can use the veto right against a

resolution calling for its invocation), it still remains as a partial measure against nuclear threats. Thus, if Israel ever decided to 'go nuclear' it would be important from her point of view that first, the Non-Proliferation Treaty be ratified and thus diminish the danger that Egypt would follow suit; also, that certain rules of behaviour concerning the Security Council guarantee be worked out. The latter requirement would be less important if Israel did not go nuclear but just retained her option. However, the first requirement would still remain crucial and for the following reason:

If Egypt acceded to the Non-Proliferation Treaty, the chances are against her attaining a high level of nuclear potential before the safeguards and controls under the Non Proliferation Treaty were activated towards her. Israel therefore could keep its lead in the field of nuclear technology. Superiority in the field of 'nuclear options' would enable Israel to use its option more flexibly for bargaining purposes. She would therefore find it a useful diplomatic instrument. This would be perhaps less the case if Arab anxiety got beyond reasonable limits.

The success of the Non-Proliferation Treaty depends partly on Israel's adherence. But doing so, would only mean that the system of safeguards and controls halted future progress, not cancelled her previous work. The phase of her nuclear option would thus at most remain static. Furthermore, under article 10 of the Non-Proliferation Treaty, Israel, like all the other parties to the treaty, could always withdraw from it, if '....it decides that extraordinary

events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country'. Thus it is in Israel's interest that the Non Proliferation Treaty should operate, whether she wishes to 'go nuclear', or only to keep her option and use it for bargaining purposes.

Could the option be used against the Arab states as well, in order to achieve some political and strategic advantages? Indeed this possibility has been elaborated upon to some extent in Israel.⁽¹⁾ It appears that it has been suggested or believed that a degree of uncertainty towards the option would serve a certain political and strategic purpose. Here however, the main idea was not the use of the option itself as a bargaining counter, but the attempt to create intentional ambiguity about the stage of nuclear development which the country had reached. In other words, it was not a use of the option, but the actual weapon. Thus, without actually producing it, the deterrence effect of nuclear weapons would be achieved.

Several more uses of the option must be considered. These can be summed up under the title of 'psychological nuclear deterrent'. This has the following elements:

a) the threat that Israel might go nuclear would be sufficient to deter the Arabs from attacking Israel; b) the creation and existence of a nuclear option in Israel, would prove to the Arabs the scientific and technological superiority of Israel. Thus it would deter them from contemplating the

(1) See 'Symposium on Foreign and Defence Policy', Ot, No.1, September 1966. Those participating in the symposium were Eshkol, Eban, Galili, Barsilai, Peres.

possibility that they could ever compete with Israel in science and technology. As scientific and technological superiority or parity are essential as a prerequisite for military victory, the Arabs would relinquish hopes of ever defeating Israel. The option serves as a symbol of Israel's will for survival and an element of frustration for the Arabs. Indeed, this particular element could be described as 'deterrence by frustration'. c) In a more limited way, the existence of the option could convince the Arabs of the superiority of Israel in the nuclear field, and thus deter them from ever contemplating the creation of nuclear weapons. This implied threat appears to be the rationale underlining Yigal Allon's remark that 'Israel would not be the first to introduce nuclear weapons into the Middle East but she would not be the second either'.^(x)

The element of ambiguity has undergone considerable change over the time. During Ben-Gurion's government, Israel's official policy first cloaked the Dimona project in secrecy, and later maintained that the project was simply intended for peaceful uses. Insistence on this explanation, and opposition to any idea of arms control in this field, only aggravated Arab suspicions and created a conviction that Israel was indeed planning to 'go nuclear' at the first possible moment.⁽¹⁾ The introduction of the formula that

(1) On 23.12.1960, immediately after the first reports on Dimona, Nasser mentioned the counter measures that the UAR will have to take against the possibility that Israel will produce nuclear weapons. (Broadcasted by Radio Cairo on 23.12.1960); much of the later Arab commentary on the question simply took for granted that Israel is aiming to 'go nuclear', and concentrated on the best Arab strategies to encounter this possibility or to deter it.

(x) cf. Jewish Observer, 24.12.1965

'Israel would not be the first to introduce nuclear weapons into the Middle East', removed a certain ambiguity and introduced a degree of certainty about Israel's terms for tacit bargaining.

As far as the Arabs were concerned, the main question was: to what extent were the uses of the Israeli option, as described above, effective? Furthermore, to what extent was the role of ambiguity within this context constructive or counterproductive from the view point of the Israeli national interest. However, an extensive and thorough analysis of the Arab position and reaction to the atomic development in Israel, would require a separate and lengthy article. Suffice it to say that basically, the creation of an Israeli atomic option does not appear to have changed the pattern and characteristics of the Arab-Israeli conflict. It did create great anxiety amongst some Arab decision-makers, mainly in Egypt: it contributed to the escalation in the arms race;⁽¹⁾ it initiated in Egypt the concept of 'preventive war'⁽²⁾ and also the threat that Egypt itself

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- (1) There have been suggestions that the Egyptian missile effort started after the disclosures about the Dimona project (see Said Fariha, a Lebanese journalist who quoted Haikal on this, and also Heikal in al-Ahram 20.7.1962). There are however two other versions as to the question of when did this missile effort start. First, suggested by Safran, in From War to War that Egypt started with this effort only later on and as a reaction to the launching of the Israeli Shavit 2 experimental rocket (namely in 1961). Second, that they started earlier, namely in 1959-1960. (See John H. Hoagland, Jr., and John B. Teeple, 'Regional Stability and Weapons Transfer: The Middle Eastern Case', Orbis, Fall 1965).
- (2) See inter alia, Heikal, al-Ahram, 20.8.1965; President Nasser in a press conference on 18.2.1966, and again in a speech on 22.2.1966 (see for the first declaration BBC Monitoring Service 22.2.1966; for the second speech see BBC Monitoring Service ME/2096, 24.2.1966).

might 'go nuclear' if Israel were to do the same.⁽¹⁾ Most important of all, the conflict continued to develop in its traditional way in the sense that when Arab-Israeli hostility became interwoven with intra-Arab competition at a critical point, and when violence became more intensive along the borders, a major political crisis exploded which eventually escalated into the war of 1967.

Conclusions

Three basic problems are involved in this discussion:

a) the extent to which the possessor of a nuclear option is ready to use that option in order to secure strategic and diplomatic advantages. It appears that in Israel this use was limited, partly due to the consideration that an option is something which should not be interfered with (and the kinds of uses which have been suggested here imply that at a certain logical point there would be some interference), partly because, at least in the beginning, Israel was unconscious of being able to use the option for such purposes. However, at a later date there was more readiness to use it for diplomatic and strategic bargaining.

(1) 'See inter alia Heikal, al-Ahram, 15.10.1965; The UAR Deputy Premier, Dr. Hatim told a Japanese journalist that if Israel went nuclear, the UAR would do the same. See BBC Monitoring Service ME/2076, 1.2.1966, quoting Radio Cairo on this (the original report was published in al-Masā, Lebanon).

b) the readiness or lack of readiness of the outside powers to be persuaded by the option, depends again on the priority they give to the problem of nuclear proliferation and on the other interests involved in their relations with Israel. To the extent that a policy of anti-proliferation becomes the overriding consideration, America would have been more prepared to put pressure on Israel not to 'go nuclear', yet would also be more prepared to give Israel growing advantages as a quid-pro-quo. As far as the Arab world is concerned, and Egypt in the first place, it is inconceivable that the existence of a nuclear option would change the basic pattern of conflict either way, or the basic strategies employed by the two sides. The existence of the nuclear option in the hands of Israel could however secure one important purpose only, namely that it would serve as a tacit deterrent against Egypt 'going nuclear', if the latter were to acquire the ability to compete with Israel in this field. This statement must be qualified: first, if Egypt ever decided that nuclear weapons in the hands of both sides would be a preferable situation to the present one. Second, if that being so, Egyptian decision-makers believed that during the time between the production of an Israeli bomb in consequence of this Egyptian decision, and the production of an Egyptian bomb, Israel would be unable to use her nuclear weapons in any way. Third, if one of the nuclear powers decided to extend extensive aid to Egypt in this field. All these three considerations must be cumulative.

c) The pertinent question is whether to increase the ambiguity and resulting uncertainty, surrounding the Israeli nuclear option or to reduce it. Every threat involves some uncertainty, which on many occasions derive from intentional or unintentional ambiguity. However one should first distinguish here between two types of ambiguity. On the one hand there is the ambiguity concerning the actual stage of nuclear development. On the other hand there is the element of ambiguity involved with any threat about 'what would happen in the future if deterrence or compellence failed'. The first type of ambiguity, in the context of intense international conflict between Israel and Egypt, can create many anxieties, suspicions and uncertainties that would not be conducive to any rational reaction to the inducement or deterrent created by the Israeli nuclear option. The second type of ambiguity is perhaps more conducive to a process of rational bargaining. However, even here as far as the relations with Egypt are concerned, what could be achieved is the deterrent effect against Egypt 'going nuclear' itself, rather than any other objective either in the realm of deterrence or compellence. And in any case, with whatever degree of ambiguity, the main effect of the option within the context of Israeli-Egyptian relations would be to serve as such a deterrent.

Still, it appears that diminishing ambiguity of both types about Israeli intentions would serve to somewhat calm those Arab anxieties which are not conducive to a rational process of bargaining. Some ambiguity of the second type must remain, insofar as Israeli reactions to possible Arab moves

are problematic, but this ambiguity should operate only in the context of the deterrence posture and not that of the compellence posture.

d) The experience of the Israeli retaliation policy of the 1950's on the one hand, and of nuclear diplomacy between the super powers on the other hand shows the very limited advantages that could be accrued from the use of the option as an instrument of compellence. Usually such a use in the Israeli-Egyptian context brought about escalation and not successful compellence. As has been pointed out above, the result in the American-Israeli context, of the use of the option as a compellent, may be different partly because what is involved is not strategic, but purely diplomatic relations.

It appears therefore that the existence of the nuclear option in Israel can serve as another instrument in her diplomatic and strategic process of bargaining with the super powers and the Arab world. To invoke this option would close, for Israel, these and future avenues of diplomatic and strategic bargaining.

This discussion does not consider whether or not Israel should have started at all with the Dimona project or whether she could have in fact secured some advantages by other means. It merely points out the present advantages and disadvantages for Israel of the option, and to some of the possible results of invoking it.

Appendix IISELECTION OF ARGUMENTS VOICED IN ISRAEL IN THE
PUBLIC DEBATE ON THE NUCLEAR ISSUE *Arguments against Nuclear Weapons

1. The suspicion that Israel is developing nuclear weapons encourages an atomic arms race in the region.⁽¹⁾
2. The world cannot remain indifferent to what Israel is doing in the nuclear field.⁽²⁾
3. There is a need for a complete nuclear disarmament in the world.⁽³⁾ The implication is that the same principle must apply to the Middle East as well.
4. As long as the nuclear weapons are in the hands of the four big powers their exclusive responsibility for the fate of humanity restrains them. There is also hope that they will come to some agreement on disarmament.⁽⁴⁾
5. If many states become nuclear the probability of nuclear wars will increase. This is mainly because there are many irresponsible leaders.⁽⁵⁾

It is not clear whether the first part of the argument stems from the mathematical argument, i.e. that an increase in the number of nuclear powers will bring, by necessity, a high

(1) Peled, Knesset, 5.7.1966.

(2) Avneri, Knesset, 5.7.1966.

(3) Sneh, Knesset, 31.10.1961.

(4) Hazan, Knesset, 6.8.1962.

(5) ibid.

(*) Some of the passages quoted below are expressed in somewhat tortuous English and sometimes appear wilfully ignorant of the terms of the strategic debate. However, as Dr. Johnson remarked, a translator's business is to translate his author and not to improve him.

probability of nuclear wars, notwithstanding whether the leaders are responsible or not, or whether it is based on the argument of lack of responsibility of the small powers.

6. Armed conflict in every part of the world, even with conventional weapons, threatens to spread all over the world. This becomes a certainty in the case of a local nuclear war.⁽¹⁾

7. The economic burden involved in nuclear weapons development is enormous and hence economic development in general will be severely hampered.⁽²⁾

8. Nuclear weapons cannot serve as a substitute for conventional arms. A good example is the U.S. where there has recently been a change in military doctrine and a new emphasis on conventional forces.⁽³⁾

9. It is not conceivable that Israel will be able to develop nuclear weapons by herself, and thus the big powers will intervene before the completion of work and all the investment will be lost.⁽⁴⁾

10. "Atoms for peace" activities are very important, but it is difficult to distinguish between a peaceful reactor and a military one.⁽⁵⁾

The implication of this being that it is preferable not to establish even a peaceful reactor.

11. The development of missiles and atomic weapons will bring about a dangerous arms race.⁽⁶⁾

(1) Hazan, Knesset, 6.8.1962.

(2) ibid.

(3) ibid.

(4) ibid.

(5) ibid.

(6) ibid.

12. There is indeed a balance of terror between the two super powers but it will not exist as between Israel and the Arabs, and this is for two reasons: (a) The warning time period in the Arab Israeli case is much shorter than in the super powers' case; (b) The super powers have a second strike capability.⁽¹⁾

The notion of second strike capability recurs frequently in the writings of the opposition to nuclear programmes. Although it has not received any thorough treatment.⁽²⁾

13. In a nuclear arms race in the region Israel will not have the upper hand. The proof is in the work going on in Egypt in the field of non-conventional weapons.⁽³⁾

14. The Arab Israeli conflict is basically a political one and deterrence is not the way to solve this conflict.⁽⁴⁾

15. Israel-German co-operation in the field of atomic energy isolates Israel in the world and puts a stigma on Israel.⁽⁵⁾

16. A small Israel with a great concentration of population along the narrow coast is more vulnerable to nuclear weapons than the Arab countries which are vast, with a dispersed population.⁽⁶⁾

17. The big powers are united in their opposition to nuclear proliferation.⁽⁷⁾

(1) Hazan, Knesset, 12.11.1962.

(2) See for other examples: Livneh, Ha'aretz, 7.2.1963.

(3) Mikunis, Knesset, 20.3.1963.

(4) Mikunis, Knesset, 25.6.1963.

(5) Sneh, Knesset, 3.11.1964.

(6) Barzilai, Knesset, 29.3.1965.

(7) Barzilai, ibid.

18. Only naive people can believe that nuclear weapons in the Middle East could create a "balance of terror". In the region it will only give birth to madness and a Gadarene race towards destruction. (1)

19. Because of the danger that a small nuclear power may facilitate a direct nuclear confrontation between the two super-powers, the latter will have to control this small nuclear power, and it will lose independence. (2)

20. A small country developing nuclear weapons will be put on the map of nuclear retaliation of the super-powers. (3)

21. If one side in the Arab-Israeli area has nuclear bombs, the other side will also have them sooner or later, and it is more probable sooner rather than later. Thus if Israel has the nuclear bomb it is beyond doubt that Egypt will also acquire one. The idea that Israel could secure an advantage over Egypt is therefore not valid. (4) The question is rather whether a situation whereby the two sides have nuclear bombs, i.e. a balance of terror will secure a situation of peace.

22. It is not clear whether the balance of terror existing today between the two super-powers is really stable and final. (5)

(1) Hazan, Knesset, 23.5.1966.

(2) Avneri, Etgar, 31.5.1962.

(3) ibid.

(4) Avneri, Haolam Hazeh 29.8.1962, the same position also by Abramov, Tmurot, September 1962.

(5) Avneri, Haolam Hazeh, 29.8.1962.

23. The leaders of the two super-powers are responsible. The same does not apply to the leaders in the Middle East.⁽¹⁾

24. There is no hope for an Israeli nuclear ultimatum against Egypt, because in such a case either the U.S. or the U.S.S.R. will supply Egypt with nuclear bombs.⁽²⁾

25. "Israel's security, like the security of Egypt and all the other Middle Eastern countries, will depend, in the long run, on unswerving efforts for an international agreement to free the region of all aggressive weapons in general, and of the new "unconventional" weapons in particular."⁽³⁾

26. The general outlook underlining part of the opposition to nuclear armaments in the Middle East is expounded in Victor Cigielman's article in New Outlook, where he - inter alia - quotes Lord Russell as follows: "The balance of power has never kept the peace in the past, and I don't see why it should in the future. The balance of power is a doctrine that has been advanced more or less since the contest between France and Spain in the time of Emperor Charles the Fifth.... The more dreadful the weapons are, the more you fear the enemy and the more you hate him. And therefore you are more ready to fight him." Lord Russell does not think that "any rational person can expect victory. But only one per cent of mankind is rational. If you took a Gallup Poll of Americans and Russians on this question 'could we win a nuclear war?' you would find a

(1) Avneri, Haolam Hazei, 29.8.1962.

(2) ibid.

(3) Victor Cigielman, New Outlook, September 1962.

great majority who would think they could." Mr. Cigielman continues by saying: "We may assume that a similar poll carried out in Tel-Aviv or Cairo would obtain a similar response." (1)

27. Nuclear arms in Israel invite super-power intervention and a danger for the loss of independence via American pressures. (2)

28. There is no point in postponing the decision about halting nuclear production. This is for two reasons: (a) If the nuclear establishment in the various Middle Eastern countries expands, the chances of imposing effective control will diminish; (b) the first stage in nuclear weapons' production is the most expensive one, and it would be worthwhile to try and get a "nuclear free zone" in the Middle East, and thus save the vast amounts of money that Israel has to spend now on this first stage. (All this within the framework of a discussion on a "nuclear free zone" under effective controls.) (3)

29. It is not probable that the Arab armies will try to launch a total offensive against Israel. It is more conceivable that they will concentrate on guerrilla attacks, Fedayeen-type activities. Against such attacks nuclear weapons do not seem to be a credible deterrent. (4)

30. Nuclear war in the Middle East means complete destruction to Israel and only partial destruction to Egypt. Precisely

(1) New Outlook, September 1962.

(2) Avneri, Haolam Hazei, November 1962.

(3) ibid.

(4) Yehuda Ben-Moshe, quoted in Al-Hamishman, 10.11.1962.

because of that there is no hope for mutual deterrence and there is a possibility that an Arab leader may decide one day that it is worthwhile to start a nuclear war because he thinks along the lines that it is better to give some sacrifice in order to destroy Israel completely. (1)

31. There will not be a state of mutual deterrence between Israel and the Arab countries ~~partly~~ because Israel will not conceive of attacking Arabs if they have only conventional arms. On the other hand the Arabs will not hesitate to attack with nuclear weapons if they have them. (2)

32. If indeed Israel has nuclear weapons first, the big powers will not allow Israel to enjoy this advantage for one moment. This could be done in one of two ways: (a) Egypt will be given the same quantity of nuclear weapons as Israel; (b) The big powers will take over the nuclear weapons that are in the hands of Israel, by direct action. (3)

33. If indeed Israel has a relative advantage in terms of time over Egypt, as far as nuclear weapons production is concerned, it is advisable to use it as a bargaining leverage in the process of negotiations towards a 'free from arms zone' in the Middle East. (4)

34. Because the big powers will not allow only one side in the

(1) Abramov, Tmurot, September 1962.

(2) ibid.

(3) Livneh, Ha'aretz, 12.10.1962.

(4) ibid.

Arab Israel conflict to have nuclear weapons, the power which "goes nuclear" first, is in fact acting for its enemy. This, because as has been stated in note 33, the big powers will redress the imbalance and the aggrieved power will get nuclear weapons without all the vast expenses.⁽¹⁾

35. There is no basis to the argument that the call for a nuclear free zone in the "area" is hollow. Those opposing this demand claim that there is no hope for evolving a valid system of inspection. However the same people that raise this objection call at the same time for a General and Complete Disarmament, where inspection will be much more difficult.⁽²⁾

36. "...Israel must take the initiative in calling upon the U.N. or more practically, upon the Soviet Union and America, to impose this nuclear disengagement..." (in the Arab countries and Israel - Y. Evron).⁽³⁾

37. The Middle East is not a closed system. Thus there is no hope that one side in the Middle East would be able to utilise its technological and scientific superiority and produce a final weapon without the other side importing it.⁽⁴⁾

38. The scientific and technological effort invested were the result of objective needs, and thus the elaborate theory developed around it should not continue. This has been manifested with the recent Test-Ban Treaty.⁽⁵⁾

(1) op. cit.

(2) Moshe Erem, Davar, 1.1.1963.

(3) New Outlook, May 1963.

(4) Y. Eilam, Ha'aretz, 2.9.1963.

(5) ibid.

39. Nuclear proliferation may bring about an annihilating war between Israel and Egypt in which the super-powers would stand aside. (1)

The policy or strategy suggested by the opponents of "Israel going nuclear" had been formulated quite early in the public debate. This was the idea of nuclear disarmament of the Arab-Israeli region in one version or the Middle East in another version. The idea was that prior to the introduction of nuclear weapons into this particular area (under either definition), some sort of agreement would be reached by which this zone would be recognized as an atom free zone. There have been different ideas as to what the safeguards or the system of control would be.

1. The solution to the atomic problem is an Israeli political effort to bring about an atom free region, one possibility being a plan similar to the Rapacki Plan suggested for Europe. This would include Turkey and Iran as well, but Israel could not contribute much in this direction. Another possibility is a nuclear free zone comprising only the Arab-Israel area. (2)

2. There is a danger that Egypt will decide to develop nuclear weapons in order to destroy Israel. It is therefore important that Israel mobilizes every political force in an effort to bring about a situation whereby the atomic arms race will not spread to the area. (3)

(1) Livneh, commenting on a famous debate between General Gallois and Henri Kissinger which took place in Paris; Ha'aretz, 6.12.1963.

(2) Hazan, Knesset, 6.8.1962.

(3) Galili, Knesset, 26.6.1962.

3. A call for an atom free zone in the Middle East. (Mikunis, Knesset, 12.11.1962; Mikunis, Knesset, 5.6.1963 in this discussion Mikunis pointed out that in any case the U.S. was pulling its nuclear forces out of Turkey)⁽¹⁾
4. A call for atom free zone in the Arab Israel area. Israel should take the initiative in keeping this new area out of the atom arms race.⁽²⁾
5. On several occasions opponents of the official policy argued that there were moves on the part of the Arabs indicating a willingness to create a nuclear free zone either in the Middle East or in the ^{Arab-} Israel area. Thus on 15.1.1963 Sneh argued in the Knesset that Israel should have a dialogue with such Arab voices. While Mikunis argued on 13.10.1964 that in the joint Soviet/Egyptian communique, published after the visit by the Soviet Prime Minister to Egypt, it was stated that they would act together for an international agreement to turn the Middle East into an atom free zone.⁽³⁾
6. The demand for a nuclear disarmament in the region has the chance of being supported by Moscow, Washington and London.⁽⁴⁾
7. The various advantages of an Israeli initiative in this direction are enumerated by Hazan as follows: "...Abdul Nasser

(1) Mikunis, Knesset, 22.12.1964; Sneh, Knesset, 30.3.1965.

(2) Mapam, Knesset, 13.11.1962; Hazan, Knesset, 24.6.1963; Barzilai, Knesset, 7.8.1963; Hazan, Knesset, 24.6.1963; Mikunis, Knesset, 22.10.1963; Sneh, Knesset, 6.1.1964 and 17.2.1964; Mikunis, Knesset, 17.3.1964; in a rather limited way Galili, Knesset, 15.7.1964; Mapam, Knesset, 20.7.1964; Maki, Knesset, 20.7.1964; Barzilai, Knesset, 12.10.1964.

(3) See also Sneh, Knesset, 30.3.1965.

(4) Barzilai, Knesset, 29.3.65.

declared that he wishes to have a "nuclear free zone in our region." When these words came following his declarations about his preparations for a destructive war against Israel, then his words lack any persuasive credibility. But we have to take the initiative into our hands and to put him to trial before the whole world. We have to declare that we are ready to negotiate with him about means that can assure nuclear disarmament and inspection of it... We start here with a peace offensive that will put the onus of responsibility of the future on the big powers and Egypt..."⁽¹⁾

8. The demand for a nuclear free zone should be directed at the big powers so that they will not allow the introduction of nuclear weapons into the area.⁽²⁾

9. A proposal for partial disarmament and especially nuclear disarmament may be an opening for peace in the Arab/Israeli conflict and at least will serve as a political asset.⁽³⁾

10. General and Complete Disarmament between Israel and the Arab countries is not feasible because it can come only after Global General and Complete Disarmament. Therefore this slogan of the government is not realistic. What is realistic is the 'Middle East as a nuclear free zone'.⁽⁴⁾

(1) Knesset, 23.5.1966.

(2) Galili, Knesset, 13.10.1964.

(3) Una, Knesset, 4.3.1963.

(4) M. Sneh, Kal Haam, 16.8.1963.

Arguments in Favour of Nuclear Weapons or a Nuclear Option

(1) With conventional weapons, Egypt can hope to reach a decisive superiority over Israel.⁽¹⁾

(2) In a nuclear arms race, Nasser will be afraid that Israel will have a decisive superiority over Egypt.⁽²⁾

(3) Nuclear arms in the hands of Israel may force Nasser to come to terms with Israel.⁽³⁾

(4) A nuclear balance, namely nuclear weapons in the hands of both Israel and the Arabs will be no worse than the present situation.⁽⁴⁾

(5) A nuclear balance namely a situation in which both sides will be equipped with nuclear weapons, may bring about a situation of mutual deterrence and no military action. During this period there will be a hope that the two sides will understand that military action is not a necessity. Thus and with the fruition of other conditions, there is a hope for a formal understanding between the two sides.⁽⁵⁾

(6) The Israel doctrine of deterrence is based on the principle of qualitative superiority that balances the quantitative superiority of the Arab side. This superiority is composed of two elements: (a) The quality of the fighting man; (b) the

(1) Schweitzer, Ha'aretz, 14.8.1962.

(2) ibid.

(3) ibid.

(4) ibid.

(5) ibid.

scientific-technological superiority of Israeli society.

As far as the fighting men are concerned, this superiority still exists. With the second element however, the situation may be changed, and in any case Israeli superiority is not a situation which by necessity will continue. Egypt hopes that with some 'special' weapons she may have an advantage over Israel and use it for a surprise attack. It is essential therefore for Israel to secure for itself every type of weapon which Egypt is either capable of acquiring or is on the verge of acquiring. Moreover Israel must do it before Egypt does. War will be eliminated if Israel had a deterrent capability superior to the Egyptian one.⁽¹⁾

(7) The danger of war would be eliminated once the two sides had the same kind of weapon.⁽²⁾

(8) The trend in the world is towards more powers having nuclear weapons. Examples are Sweden, India, Canada and West Germany.⁽³⁾

(9) If Egypt equipped itself with nuclear bombs, the balance between Egypt and Israel would change fundamentally, and these weapons would become the decisive weapons in the hands of Egypt. If Israel also equipped itself with these weapons, then a balance of terror would emerge, similar to the one that insured that no third world war took place.⁽⁴⁾

(1) Rimalt, Tmurot, September 1962.

(2) ibid.

(3) Poles, Ha'aretz, 29.9.1962.

(4) ibid.

- (10) If Israel equipped itself with nuclear bombs it would redress the imbalance in conventional weapons which is in existence at the moment.⁽¹⁾
- (11) Israel is not interested in destroying Cairo or over-running it. This should be remembered within the context of a debate on nuclear policy.⁽²⁾
- (12) The alternative to nuclear weapons in the hands of Israel is that Israel will join Nato. Till now however, Nato had made no sign that it is ready to let Israel join it. The real alternative therefore is not neutralism but a strict pro-western orientation.⁽³⁾
- (13) The introduction of new weapons into Israel may enable her to achieve strategic deterrence and also enforcement or dictation of her objectives to the other side.⁽⁴⁾ (Because of the probable intentional ambiguity of the argument it could not be construed necessarily as representing Mr. Peres' approach to nuclear policy)
- (14) A possible reference to nuclear weapons or to a nuclear option and the perception of these weapons is contained in the following comment by Peres: 'With us the difference between demonstration of weapons and the uses of weapons is the

(1) ibid.

(2) ibid.

(3) ibid.

(4) This was suggested in a rather indirect way by Peres in Yediot Ahronot, 28.9.1962; and in the same cautiousness in Davar, 28.9.1962.

difference between deterrence and defence. Deterrence is this type of weapon which would impress the process of considerations of the other side. Defence is the type of weapon we need according to our own considerations. There is not always a contradiction between the two. To the extent that there is one we should not neglect one in favour of the other. (1)

(15) If time favours the Arab side in the conflict, there is no guarantee that the Arabs would not use it in order to acquire such conventional capability which would be sufficient to destroy Israel. (2)

Arguments refuting the notion of 'The Middle East as a nuclear free zone'

(16) All the proposals for regional nuclear disarmament (like the Rapacki plan) have the basic common assumption of willingness to have coexistence. This is not the case in the relations between Israel and the Arab countries. (3)

(17) Plutonium could be produced in secrecy and hence there is no guarantee that the Arab side would not produce it under such conditions of secrecy. Moreover there is no system of inspection against deliveries from outside. (4)

(1) Peres, Davar, 4.1.1963.

(2) Rimalt, Haboker, 17.5.1963.

(3) ibid.

(4) ibid.

(18) Inspection would mean that the inspectors may find conventional military secrets while conducting their inspection.⁽¹⁾

(19) It is wrong to assume that the present three nuclear powers (America, Russia, Britain) are the only responsible powers in the world. This argument about the responsibility which could be found only among the leaders of the nuclear powers is an insult to other countries like India, Canada, Sweden and China. As this argument is not well founded the main argument against proliferation is not valid.⁽²⁾

(20) Indeed the three nuclear powers of today (written in 1963 - Y. Evron), had been involved in this century in big wars, or conversely became involved in wars too late and thus threatened the peace of the world. The examples are: Britain with the appeasement policy; America joining the Second World War too late, and the Soviet Union even going to the length of signing a non-aggression pact with Germany. All this proves that they are not more responsible than the others.⁽³⁾

(21) In the Cuban missile crisis, Washington was not far from the point of deciding to use nuclear weapons.⁽⁴⁾

(This kind of argument obviously contradicts other arguments in favour of the stability of a nuclear balance of deterrence.)

(1) op. cit.

(2) Poles, Ha'aretz, 15.7.1963.

(3) ibid.

(4) ibid.

(22) The only alternative to nuclear proliferation and an alternative which should be demanded by the potential nuclear powers as a quid pro quo is a joint guarantee by all the three nuclear powers to the security and territorial integrity of each and every state in the world. This however is not forthcoming at all and is not realistic. (1)

(23) Israel has secured a limited room for manoeuvre within the context of the arms race in the Middle East which enables her to bring pressure to bear upon the big powers to halt the arms race in the Middle East. By declaring herself to be in favour of nuclear disarmament in the Middle East, Israel would only sabotage her own position. (2)

(24) The question whether a small state can or cannot develop nuclear weapons or should or should not do it, is not more relevant because several small states like West Germany, India, Canada, Sweden and Yugoslavia would become nuclear powers within a period of three to five years. And if this is the case then Israel must take into account the possibility that some of them would aid Egypt to narrow the gap existing between her and Israel in this field. Egypt already has scientific agreements with India, Yugoslavia and Communist China. (3)

(25) The Arabs may reach qualitative parity with Israel (the

(1) Poles, Ha'aretz, 15.7.1963.

(2) M. Zak, Ma'ariv, 9.8.1963.

(3) Segev, 'Symposium on Nuclear Weapons', Hotam,

advocate here means presumably parity in conventional weapons - Y. Evron). If this is the case then one must go back to the question of the nuclear weapon.⁽¹⁾

(26) Israel is facing recurrent arms races which become more intensive each time (presumably in conventional weapons - Y. Evron). But in the field of scientific development she has reached a superiority which enables her both to deter the Arabs and even to reach decision ('Hachra'ah' in Hebrew). Such superiority should not be given up just because somebody argues that the other side does not want to destroy Israel.

'...I think that this could have been one of the ideal situations that Israel could have reached, namely that the Arab countries recognized Israel's deterrence capability and therefore are not ready to fight against her. On the contrary, now the Arabs are talking about a war of defence against Israel and not about a war of annihilation. ... Unconsciously there had been created a deep recognition of Israel's capability not only to deter but also to reach a decisive position ('Hachra'ah' - Hebrew), and accordingly they have planned their policy in the last year. Suffice it to mention the fact that the Jordan water project had been activated without any problem, that the Arab plans for diversion of the Jordan water have been frustrated without our being compelled to be involved in a large scale war. Suffice it that we have now comparative peace along the borders...'⁽²⁾

(1) Schweitzer, 'Symposium on Nuclear Policy', Hotam, op. cit.

(2) Segev, 'Symposium on Nuclear Policy', Hotam, op. cit.

(27) There is a possibility of creating a balance of terror between Israel and the Arab countries. This is so although Israel is small and hence more vulnerable. In fact the conflict is mainly with Egypt and Egypt means mainly the big cities and those could be destroyed exactly as Israel could be destroyed. Moreover the Arab Israeli conflict is similar to the super powers' conflict because in both cases these are total conflicts. These are conflicts not on territories but on absolutes. In the super powers' case it is on the control of the whole world and in the Arab Israeli conflict it is about the existence of Israel. This similarity reflects also on the possible similarity in the creation of a balance of deterrence. (1)

(1) Segev, 'Symposium on Nuclear Policy', Hotam,
op. cit.