Modernisation and its side effects

- an inquiry into the revival and renaissance of herbal medicine in Vietnam and Britain

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For the Willamos & the Wahlbergs

Abstract

Herbal medicine has experienced tangible revivals in both Vietnam and the United Kingdom since the mid-20th century, as reflected in sales of herbal medicinal products, numbers of users and the availability of training opportunities for aspiring herbalists. In both countries, this revival came on the back of more or less concerted official efforts to discourage and even ban the practice and use of herbal medicine, by colonial authorities (in Vietnam) or professional medical associations and regulatory bodies (in the UK). Utilising archaeological and genealogical methods as developed by Canguilhem, Foucault and others, this study seeks to account for these revivals by pursuing three particular lines of analysis. Firstly, by describing the formations of power-knowledge relations which have allowed Vietnamese and British herbal medicine to challenge biomedical monopolies in the latter half of the 20th century, it is argued that the ways in which 'quackery' is conceptualised and regulated against in both countries today, has undergone substantial transformations. Secondly, by identifying the techniques of truth making which either suggest or contest a superior efficacy (over placebo) for two particular herbal medicines in the treatment of depression (in the UK) and addiction (in Vietnam), the study demonstrates how the concept of 'efficacy' not only pertains to bio-physiological effects but also to the symbolic effects of the treatments in question. Finally, by asking what kind of 'life' herbal medicine is seen to be affecting, it is suggested that longevity has been joined by quality of life as a separate, yet inherently interlinked, therapeutic site. One of the key conclusions of the dissertation is, that the sub-disciplines of medical anthropology and sociology have played a crucial role in the 20th century births of 'traditional medicine' and 'complementary and alternative medicine' (as opposed to 'primitive' and 'fringe' medicine). Firstly, in diagnosing a 'crisis of modern medicine' by highlighting its dehumanising and toxifying effects, and secondly, in providing a theory of symbolic efficacy which could help explain the continued importance of what had in the past been written off as 'esoteric' or 'backward' healing practices. As a consequence, the study describes how an ongoing governmentalisation of human subjectivities has been a requisite side effect of modernisation in the recent revival and renaissance of herbal medicine in Vietnam and the United Kingdom.

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Acronyms

AMH	Association of Master Herbalists
BHMA	British Herbal Medicine Association
BMA	British Medical Association
CAM	complementary and alternative medicine
DSM	Diagnostic and Statistical Manual of Mental Disorders
HAM-D	Hamilton Depression Scale
HPLC	High Pressure Liquid Chromatography
ICD	International Statistical Classification of Diseases
IDQC	Institute of Drug Quality Control
MHRA	Medicines and Healthcare products Agency (previously Medicines Control Agency)
NIMH	National Institute of Medical Herbalists
TLC	Thin Layer Chromatography
TM	traditional medicine
TMCAM	traditional, complementary and alternative medicine
UNDCP	United Nations Drug Control Programme
UNOPS	United Nations Office for Project Services
WHO	World Health Organization

Preface – knowledge and practice

"It's a herbal remedy? Addiction? Yes… Vietnam… Yes… Well, that sounds pretty amazing, how much do we know? Really? Yes, let me call you back."

A Master's student at the time, I was working a few days a week as an assistant in the information unit of a UN development agency in Copenhagen. My boss called me into her office where she had just finished the telephone conversation I had overheard. I was asked if I wanted to go to Hanoi a few months later in August. The Vietnamese government and the UN Development Programme were about to sign a three-year agreement in June of 1997 for a project on the "International Scientific Development of the Anti-Drug Medication Heantos". This was a story that would sell itself and the idea was to invite a group of European journalists to meet with the herbalists, scientists, doctors, UN officials and government representatives who had made the project possible. In the field of international development, most stories have to do with a one-way flow of resources, technology, know-how and humanitarian aid from industrialised to developing countries. Here was a story that turned the tables, a herbal remedy from a developing country which could potentially help the industrialised West with one of its fastest growing scourges, namely drug addiction. Before boarding my return flight back home from Hanoi, I bought myself a copy of the 22 September 1997 issue of *Time* magazine to help pass the hours. A full-page article in the health section was asking whether St. John's Wort, a folk remedy made from the plant *hypericum perforatum*, was "Nature's Prozac?". Apparently a string of recent clinical trials and pharmacological experiments in Germany were suggesting exactly that, with European sales skyrocketing as a result.

I was otherwise busy finalising a degree in social science and international development studies in the middle of a field some thirty kilometres west of Copenhagen. The development studies course at Roskilde University was consistently overbooked. Most of us had travelled the world many times over, enough to realise how much of a luxury shoestring travel was when compared to the misery of the lives of the majority in many of the countries we had travelled in. We were convinced that the time was indeed ripe for alternative thinking in development studies as a new millennium approached; the World Bank, the WTO, the WHO and other international agencies had got it all wrong. An

alternative development was needed or even better, alternatives to development. Resistance, emancipation and the subaltern were the orders of the day. At the same time, a few of us at the institute began wondering how we could be so sure in our convictions. Post-lecture discussions turned into weekly 'grid sessions', as we called them. Rather than approach underdevelopment as some kind of ontological state or condition (of a continent, country or community), we learned to ask how we might approach it as a problem. What was it that made the alternative so compelling in attempts to address this problem? It was an approach I would pursue intensely in a Master's thesis about alternative development and one that I continue to pursue with equal intensity in the chapters that follow about alternative medicine.

Since the summer of 1997, I have returned to Hanoi for extended stays on three occasions, twice to work as an intern at the Institute of Chemistry (in 1998 and 1999) where herbalists and scientists have been working to further develop Heantos for a decade now, and most recently in the fall of 2004 to do some follow-up fieldwork for this current study. During these stays I had the opportunity to travel throughout the north of Vietnam, meeting and learning from traditional practitioners, users of herbal medicine, doctors, government officials, UN agency representatives and local members of the Communist party in the many towns I visited. I had the chance to visit remote villages where opium cultivation and use have been a practice for centuries, to drive along the treacherously winding roads favoured by traffickers of opium resin, to talk with the addicts whose demographics neatly match the traffickers' routes, and to witness the treatment of addicts with Heantos and other forms of treatment in rehabilitation centres usually located on the fringes of towns and cities. In Hanoi, I spent many hours in the laboratories of the Institute of Chemistry, also visiting institutes of Drug Quality Control, Materia Medica and Traditional Medicine.

In the United Kingdom (the second empirical site of my study), I have been closely following debates over complementary and alternative medicines since November 2000 when a research visit of mine to the British Library happened to coincide with the publishing of a controversial House of Lords Select Committee report on the growing use of CAM therapies in the UK (I recall an editorial in the *Guardian* asking "Con or cure?"). This task has been facilitated by my move to London in the fall of 2003 to commence work on this dissertation. Based in London, I have had the chance to explore the many different features of an urbanised herbal medicine which, in contrast to almost universal usage in

Vietnam, is very much a minority medicine. This has included forays into the Holland & Barrett outlets that stock natural remedies, bookshops that supply self-medicating herbal medicine users with guides and tips, and internet community sites where sufferers of depression exchange their experiences with St. John's Wort. I have also had the opportunity to speak with practitioners of western herbal medicine in the United Kingdom about ongoing efforts to professionalise their trade and to industrialise their remedies.

As it happened, my interest in Heantos and St. John's Wort took me to numerous laboratories and clinics throughout Germany, a country that has long played a leading role in developing scientific techniques for the modernisation of herbal remedies. Over the past three years, I have spoken at length with the scientists and clinicians in these different sites about the challenges they face when working with herbal medicines. While in the laboratories I was given the opportunity to see the scientists at work as well as given layman's introductions to the technologies and equipment they use. In the clinics, I learned about the diagnostic criteria, clinical outcome measures, and patient selection processes used in clinical trials to test the efficacy of St. John's Wort and Heantos in the treatment of depression and addiction respectively. I also spent hours in medical libraries photocopying articles about the pharmacology of the plants I was interested in, as well as clinical trial results.

I have done all this because I am interested in herbal medicine as a problem, or rather as a field of problematisation made up of bodies of knowledge and assemblages of practices. If herbal medicine is to be promoted, what are the problems to which it is seen as a solution? Conversely, if herbal medicine is to be discouraged, what are the problems that its practice and use are seen to engender? If we are in need of an alternative medicine then what are the failings of the medicine that it is an alternative to? If we are not in need of an alternative medicine then what should be done with those medicines which indeed are alternative? These are the kinds of questions which might be asked if we want to understand the conditions that make the alternative possible.

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As always, the making of such a study as this could not have been possible without the support, guidance and expertise of a number of people. My sincere thanks to the Danish Research Agency for a three-year internationalisation grant which has not only allowed me

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That I at all was given the chance to travel to Vietnam and to meet the many remarkable people that I have over the past years, I owe to Eva Arnvig and Dr. Lutz Baehr who I warmly thank for their support and encouragement over the years. In Hanoi, it is safe to say that without the generosity and assistance of Tran Khuong Dan, Professor Tran Van Sung, Nguyen Ba Chinh and Nguyen Quang, this study would never have happened. The passion and inventiveness of their work remains an inspiration in my own. Thanks also to the Institute of Chemistry of the National Academy of Natural Science and Technology for generously providing me with facilities and assistance, especially with translation, during my stays. I also owe my gratitude to Professor Hoang Bao Chau for patiently providing me with fascinating first-hand insight into the history of traditional medicine in Vietnam. And in further socio-historically contextualising my own contemporary analysis I have benefited greatly from the work of Laurence Monnais, Michele Thompson and Annick Guenel, all of whom generously shared their knowledge and insights with me.

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regulatory side, my thanks to Anna Dixon (LSE Social Policy) for sharing her extensive insight into the development of professional regulation for CAM practitioners, both nationally and internationally.

In terms of academic training and inspiration, there are also a number of people whom I am greatly indebted to. As already alluded to, this project and the questions that it attempts to raise started some years ago for me. The community of students studying international development studies at Roskilde University in the late 1990s, especially the grid'ers among us, were a massive motivation for me in deciding to continue with my academic training. Fellow PhD candidate and philosopher Janne Mäntykoski has also been an invaluable intellectual companion for almost two decades now. Since moving to London to study at the LSE, I have been especially fortunate to be able to share the challenges and highlights of postgraduate research with fellow PhD students at the BIOS Centre and at LSE Sociology. In particular, I would like to thank Chris Hamilton, Annette Jensen, David Reubi, Dr. Scott Vrecko, Linsey McGoey, Megan Clinch, Kerstin Klein, John MacArtney, Btihaj Ajana, Lamprini Kaftantzi and Mathew Kabatoff for always constructive engagement and for so many delicious cakes. I would also like to thank Dr. Carlos Novas, Dr. Filippa Lentzos and Dr. Michael Barr for sharing their insight and thoughts along the way, especially Carlos and Filippa for comments and valuable help in the final working through of the dissertation.

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1 Modern failures, traditional remedies

When a working party put together by the British Medical Association in 1983 reported on some of the main causes they had identified to explain a growing interest in alternative therapies, their conclusions were rather familiar:

> Relatively few years ago, when little therapeutic help could be offered, the physician devoted much time to counsel and to support the patient. Now therapeutic intervention, often life-saving, is quickly and skilfully available, and has become so commonplace that the swiftness of the changes is forgotten and the significance of the consequences passes unnoticed. One of the consequences of the changed nature of the relation of the doctor to the patient is that the current pressures and the technical demands of modern medicine do not allow him the opportunities formerly devoted to counselling, sympathetic contact and support… An additional consequence of the advances in medicine in the latter part of this century is the impact of these far-reaching changes on the nature of the doctor's training, with increasing emphasis on the scientific aspects of the curriculum, and a growth of specialisation… An additional aspect should be mentioned. The growth and dependence on new diagnostic aids of all kinds, the nature of the haematological and pathological services, and their matter-of-fact and impersonal nature are identified by the patient, the physician and the medical technologist alike as an intrusion juxtaposed between patient and physician… Yet this new orientation and attitude of doctors trained in the last 30 years has not been matched in the provision of support services to meet the novel and still-growing demand from the modern patient for communication, information and instruction. (British Medical Association. Board of Science and Education. 1986: 3-4)

It is no secret that modernity has of late been in for somewhat of a scolding. The processes of industrialisation, commodification, technologisation, differentiation, rationalisation, modernisation, professionalisation, and bureaucratisation that are considered defining of the modern era have been variously diagnosed as alienating, disenchanting, ossifying, repressing, and dehumanising in their effects. If we are to believe classic sociological critiques of modernity then it is the individual – the subject – who is all the worse for it, something that the BMA working group seems to concur with in reflecting over the achievements and shortcomings of their own profession. Even in those contexts where developments in medicine and technology are maintained to have secured dramatic advances in longevity and welfare, the subject is nevertheless seen as having been swallowed up by vast societal programmes that have effectively torn him or her out of a personal realm of traditional and familial relations and into a social realm of impersonal

statistical inevitabilities and bureaucratised interaction. The rationalisation of doctor-patient relations, for example, is charged with having turned patients into passive recipients of healthcare, trapped in a 'spiritless' technocracy of GPs, specialists, and medical technologists.

Yet, it is not only the interiority of the subject, the modern soul, that is seen as having been corrupted by modernity's *isations*; the very vitality of Man – as well as that of the flora and fauna surrounding him – it would appear has also been compromised by these same societal processes. Some nine thousand kilometres to the east of the United Kingdom, Vietnamese health practitioners have been actively engaged in half-a-century's worth of efforts to revive and reintegrate Vietnamese traditional herbal medicine into their national health delivery system, not only because of its economic viability but also because it is considered "less aggressive" than modern medicine which despite its many advances is seen as "powerless before many diseases" (Bùi 1999; Huu and Borton 2003; Nguyen, et al. 1965). In Vietnam, modern medicines are often described as toxic (*doc*), addictive (*quen thuoc*), chemical (*hoa chat*), and, consequently, as causing a wasting of the body (*sut*), weakness (*suy nhuoc*) and lethargy (*met moi*) in persons using them. In contrast, traditional medicine is considered nutritious (*bo*), harmless (*lanh*), natural (*thien nhien*) and therefore virtually side-effect-free (*khong cong phat gi*) (Craig 2002: 105, 152).

Far from promoting traditional medicine as an alternative to modern medicine, however, programmes to revitalise the practice and use of traditional herbal medicines in Vietnam have instead been built up around a combined approach where age-old medicinal herbs, for example, can be used as an indispensable means to ameliorate or even avoid altogether the harmful side effects of modern treatments as well as to tackle newly emerging health problems such as the "social evils" of drug addiction, obesity, cardiovascular diseases and other lifestyle-related illnesses (Vietnam. Communist Party of Vietnam. 2005). Further to their soul-battering effects, critiques of modernisation and technologisation have also singled out unwanted effects in the form of life-enfeebling contaminations that have had a degradatory effect on not only our ability to live but also our 'quality of life'. From the toxicities and side effects of synthetic pharmaceuticals and processed foods to the smog and waste of factories and automobiles, the life effects of modernisation have increasingly come to be seen as liabilities. A modern way of life, it is argued, has come at the cost of a degenerated 'nature' which, while not necessarily diminishing our longevity (we are after

all living longer these days), has certainly diminished the quality of life of individuals and populations.

Bearing such accounts of the soul-battering and life-enfeebling effects of modernity in mind, it is not too hard to understand the sheer explosion in sociological critique built up around a theory of the subject that started somewhere around the mid-20th century. It was after all this subject that had been alienated, dehumanised, repressed, and degenerated by those very same institutions that had allowed Man to free himself from the constraints of an unpredictable Nature with its famines, floods and epidemics. In stark contrast to the optimism of Enlightenment writers who had celebrated humanity's liberation from a 'self-incurred immaturity' characterised by "profound darkness, ... theological day-dreaming, superstitious imposture and priestly tyranny" (Condorcet 1955 [1795]: 77), late 19th and early 20th century social scientists vividly recorded their impressions of another kind of imprisonment. Both Marx ([1867] 1999) and Durkheim ([1893] 1984) described how the herding of people into the urban workshops of the industrial revolution "imposed upon mankind monotonous and unceasing labour… of which [he] gradually becomes a prisoner" (Durkheim 1984: 187, 270), ultimately "convert[ing] the labourer into a crippled monstrosity, by forcing his detail dexterity at the expense of a world of productive capabilities and instincts" (Marx 1999: 209).

Only a few decades later, Simmel, Freud and Weber took this analysis out of the sweat and grime of the factory floor and into the white-collar world of 20th century bureaucratisation and urbanised metropolitanism. Simmel argued that "punctuality, calculability, exactness are forced upon life by the complexity and extension of metropolitan existence… favour[ing] the exclusion of those irrational, instinctive, sovereign traits and impulses which aim at determining the mode of life from within, instead of receiving the general and precisely schematized form of life from without" ([1903] 1950: 411). For Freud, this "instinctual renunciation" was an inevitable effect of an ongoing and general process of civilisation through which "external coercion gradually becomes internalized", relieving men of foreboding "states of anxious expectation" that might otherwise arise ([1927] 1961: 13-4). And Weber ([1922] 1976: 361-2), of course, famously lamented that:

> It is horrible to think that the world could one day be filled with nothing but those little cogs, little men clinging to little jobs and striving toward bigger

> ones… This passion for bureaucracy ...is enough to drive one to despair. It is as if in politics… we were deliberately to become men who need 'order' and nothing but order, become nervous and cowardly if for one moment this order wavers, and helpless if they are torn away from their total incorporation in it. That the world should know no men but these: it is in such an evolution that we are already caught up, and the great question is, therefore, not how we can promote and hasten it, but what can we oppose to this machinery in order to keep a portion of mankind free from this parcelling-out of the soul, from this supreme mastery of the bureaucratic way of life.

Habermas would eventually summarise this most famous of sociological hypotheses as a colonization of the lifeworld, which is to say a "penetration of forms of economic and administrative rationality into areas of action that resist being converted over to the media of money and power because they are specialised in cultural transmission, social integration, and child rearing" (1987: 330).

It was precisely as antidotes to such alienation, repression and dehumanisation, that the experience, agency, identity, vitality, and reflexivity of the subject were theoretically 'rediscovered' and celebrated in the mid-20th century, opening up new possibilities of emancipation and revitalisation for the alienated and degenerated. It was around this time that a 'hegemonic' and 'Eurocentric' modernity was being ditched in favour of a 'post-modernity' that was permanently suspicious of grand meta-narratives, while encouraging of the specificities and dynamics of local identity politics that allowed individual subjects to negotiate their personal lifeworlds and world-views (albeit within the context of their own communities) as well as to construct more balanced life strategies that were in tune with 'nature'. A 'post-modern' ethical *telos* emerged around the subject's capacities of agency, reflexivity, vitality, and identity.

It is as if the enlightened optimism that surrounded 18th century social engineering projects was reignited in the 20th century with the discovery that Man could once again be emancipated, this time from the soul-battering and degenerative side effects that modernisation had brought in its wake. Not only was the latter half of the 20th century a time of intensifying post-modern critique, it was also a time when alternatives to the grand projects of modernity began to be formulated amidst a growing *mêlée* of protests, post-colonial independence declarations, ecological movements, cultural revolutions and

lifestyle experiments.[1] The appalling shortcomings and failures of medicine, education and economic development were to be remedied by an alternative medicine, an alternative education, an alternative development. These alternative movements opened up numerous sites of resistance and contestation as they began to question 'expert knowledge' as well as those authorities who could speak it. Their criticisms, fuelled by social indignation, were especially directed at the hitherto neglect of the 'whole person' as one of the crucial failures of what were seen as hegemonies of westernised and rationalised education, medicine or development. In this way, the alternative became synonymous with the emancipatory, and the alternative project became one of activating, liberating, and engaging the 'missing persons' of social government, not in the least by encouraging a critical attitude towards authorities, by appealing to an identity politics and by promoting radically new lifestyles (cf. Rose 1996a).[2] And so, it was from within the alienated and degenerated subject of modernity that an emancipatory potential to counteract these same side effects could be rescued – all that was needed were new forms of *ascesis* or ethical work on the self to secure a kind of recuperation of our ossified lifeworlds and a revitalisation of our toxified bodies. This was to be not so much a liberation from a self-incurred immaturity as an emancipation from a self-incurred alienation and toxication, as we will be seeing.

Nowhere have the contestations and pronouncements of failure that make up the alternative been more striking than in the field of medicine.[3] And it should come as no surprise to learn that the birth and subsequent rise of an 'alternative medicine' around the 1960s coincided with a steadily escalating critique of modern medicine by a number of anthropologists, sociologists, patients, alternative therapists, post-colonial administrators, traditional practitioners, psychologists, and even medical doctors – a motley group of professionals, academics and grassroots activists that amounted to what Saks (2003) has aptly described

[1] According to Habermas these events constituted "the painful manifestations of deprivation in a culturally impoverished and one-sidedly rationalised practice of everyday life" (1987: 395).

[2] It is interesting to note that in the closing decades of the 20th century, the contestations, identity politics and lifestyles of the 'alternative' and the 'subaltern' became key features of contemporary forms of social resistance, embracing an expanding range of fields. By now, further to the pioneer sites of resistance in alternative medicine, education and development, we also find alternative media, alternative music, alternative energy, alternative globalisation, alternative technology, and even alternative travel (for all those resisting the 'Lonely Planet hegemony'). Although diverse, the movements behind these alternatives seem to share not only in a general scepticism towards authorities, but also in a forceful critique of what are seen as the inhumane and/or non-ecological antagonists of these movements (e.g. multinational corporations, the World Bank, oil companies, corporate media and entertainment conglomerations, etc.).

[3] Something the BMA found "hardly surprising, [since] modern medicine – preventive, curative or palliative – impinges on the lives of everyone" (British Medical Association. Board of Science and Education. 1986: 3).

as an emergent medical counter-culture. No doubt a direct result of these overlapping events, it has become common to explain a growing use and practice of traditional, alternative and later complementary medicines (TM and CAM for short) in terms of a collective movement to '(re)humanise medicine' that is actively challenging and by now even reforming a cold, cynical and century-old monopoly or hegemony of modern medicine. In other words, the histories of TM and CAM are often told as a struggle against a restrictive and repressive regulatory system that has privileged a single form of medicine to the detriment of its patients, who, it is argued, have not only been alienated and degenerated by the kinds of effects identified by the British Medical Association and their Vietnamese counterparts, but also been denied access to more 'human' and more 'natural' therapies that are safer and perhaps even more efficacious than modern medicines. Alternative and traditional medicines have emerged from this history not only as economically viable alternatives to expensive modern medicines, but also as remedies (literally so) to the dehumanisation and degeneration associated with modernity. By recommending 'natural', 'whole person' lifestyles that embrace organic foods and natural medicines, these alternative medicines promote balance, harmony, agency, responsibility, and quality of life.

Now, what makes the sociological contribution to this ongoing history of modernity all the more engaging is the more recent analysis put forth by a number of late 20th century sociologists as to the side effects of this latest of liberations; this time from mono-scientific rather than ecclesiastic dogma. In sociological studies of our current 'post', 'late' or 'high modern' condition by contemporary social theorists such as Bauman, Giddens and Beck, it is suggested that emancipation (to the extent that it has been achieved) has come at the cost of increasing existential fragmentation, liquidity, anxiety, uncertainty, and insecurity. Now more than ever, set adrift from modernity's grand meta-narratives, we are left to cope and negotiate in a world riddled with a plurality of (hybrid) worldviews, lifeworlds, meanings and identities. If once we were 'kept immature' by priestly tyrannies and superstitious imposture or 'deadened' by the dull and monotonous disciplining of our factories, schools, and barracks, we are today 'thrown off balance' by the sheer barrage of meanings, symbols and knowledges coming at us from our televisions, supermarkets, social movements, local communities, peer groups and universities not to mention left anxious and disconcerted in the face of the unforeseeable ecological, political and existential consequences of hyper-modernisation and globalisation.

As argued by Giddens, late modernity "fuels a general climate of uncertainty which an individual finds disturbing no matter how far he seeks to put it to the back of his mind; and it inevitably exposes everyone to a diversity of crisis situations of greater or lesser importance, crisis situations which may sometimes threaten the very core of self-identity" (1991: 184-5). What is more, Beck suggests that this climate of uncertainty has arisen at a time when "traditional forms of coping with anxiety and insecurity in socio-moral milieus, families, marriage and male-female roles are failing" (1992: 153). And so we are left stranded in "a state of uncertainty never before so agonizing [while] we yearn for guidance we can trust and rely upon… but the authorities we may entrust are all contested, and none seems to be powerful enough to give us the degree of reassurance we seek" (Bauman 1993: 21). Out of this latest chapter of modernity, as we will be seeing, alternative and traditional medicines have emerged as new and 'alternative' sources of existential grounding and guidance, providing patients who have lost faith in their doctors with novel forms of coping strategies which, it is argued, take into consideration the patient as a 'whole person' to a far greater extent than modern medicine.

But what if, following Foucault (1977), we were to, in a sense, invert this history? What if the dividing practices that have characterised modern systems of medical regulation are analysed, not solely in terms of their 'repressive' effects, but also their productive effects in providing possible solutions to the contested questions of how to distinguish good from bad medicine, safe from toxic remedies, competent from incompetent practitioners, and responsible from irresponsible patients? What if the strategies and practices of alternative healing are viewed, not as liberating an alienated subject from the clutches of an impersonal modern medicine, but rather as important elements in the contemporary making up and managing of new, whole person subjectivities, providing individuals with innovative ways of understanding and relating to themselves as well as concrete strategies for working on and transforming themselves into these whole persons? What if these same practices are seen, not as restoring a degenerated subject to a 'natural' state of balance, but rather as cornerstones in the inauguration of quality of life as a key site of therapeutic intervention? Such an inversion entails an entirely different approach to the history of present alternative and traditional medicine practices, not as politics or polemics, but rather as problematisation. It requires analysing herbal medicine "not from the point of view of politics, but always to ask politics what it has to say about the problems with which it was

confronted…, [to] question it about the positions it takes and the reasons it gives for this" (Foucault 1997a: 115). That is to say, it requires not determining whether a form of medicine is proper, good or better, but rather asking how the problems of what is good as opposed to bad medicine, an efficacious as opposed to an inefficacious remedy, a competent as a opposed to an incompetent practitioner, an active as opposed to a passive patient, or a dangerous as opposed to a safe herbal medicine, have come to be posed, as well as how solutions to these problems have come to be suggested. But before unfolding the purpose of this study any further, let us take a closer look at the ways in which traditional, alternative and complementary medicines have been sociologically accounted for to date.

The crisis of modern medicine

Notwithstanding acknowledgment of important advances made possible by hygiene practices, antibiotics and anaesthetics, modern medicine was regularly described as in crisis by the 1960s. It was a crisis that has since come to be seen as partly iatrogenic (i.e. brought on by the ignorance and/or inability of doctors, as well as by the harmful effects of their medications), partly organisational (i.e. brought on by the ill effects of bureaucratised doctor-patient relations) and partly conceptual (i.e. brought on by the limitations of doctors' reductionist concepts and definitions of health and illness). This, at least, is the picture that has emerged from a good half-century of sociological and anthropological studies in the field of medicine.

Starting from the mid-twentieth century, the fields of medical sociology (and anthropology), social studies in health and medicine, the sociology of health and illness, and the sociology of medicine have spawned a wide range of studies on the sick role, medicine as a profession, the experience of health and illness, the social construction of illness, the medicalisation of society, the inadequacies of public health delivery systems, and changing concepts of health and illness (see Albrecht, et al. 2000; Bird, et al. 2000). These studies have for the most part shared in a critical questioning of modern medicine, or biomedicine as it is popularly known today,[4] which is typically described as "the dominant allopathic approach that treats disease as a breakdown to be repaired by direct biochemical and/or surgical intervention" (Saks 1995: 104). And while there are of course many

[4] I will use the two terms interchangeably throughout.

different theoretical and methodological approaches to doing sociology in and on the medical field, a recent handbook on social studies in medicine suggests that the common critical task of social scientists is "to question dominant definitions of health and illness, to evaluate alternative options for achieving health, and to assess the appropriateness of health-care systems for individuals and groups" (Albrecht, et al. 2000: 5).

Accordingly, sociological studies in medicine have in large part focused on what are seen as the dire limitations and shortcomings of a biomedical profession that has monopolised society's understanding of health and illness, and consequently medicalised virtually all aspects of our existence, from birth to death. Sociological and anthropological rulings on biomedicine are wide-ranging. Illich famously accused modern medicine of in fact exacerbating illness through processes of clinical, social and cultural *iatrogenesis* that have transformed individuals "into unfeeling spectators of their own decaying selves" (1976: 35). Kleinman has claimed that "biomedical reductionism and [the] technological 'fixes' it employs are inadequate to understand and treat most problems in health care" (1980: 381). Stacey has argued that there are "limitations to modern clinical medicine which come from the limitations imposed by its conceptual framework as well as from its mode of organization" (1988: 172). And O'Connor has suggested that "conventional medicine does not and cannot provide everything that people need in order to cope with all aspects of the experience of illness, or to meet their desires to achieve or maintain optimal health" (1995: 162). Indeed, it is not too much to suggest that from some fifty years of critical social analyses of medicine emerges a caricature of biomedicine as cold, reductionist, side-effect engendering, hegemonic, highly technologised, impersonal, synthetic, and toxic.

In sharp contrast to this caricaturised biomedical approach to healing stands alternative medicine, a field that, as already mentioned, saw its birth in the emergent medical counter-culture of the 1960s. It was around this time that a whole range of what (for just over a century) had been considered 'fringe', 'marginal' or even 'quack' therapies in the industrialised world (see Bynum and Porter 1987; Inglis 1964; Wallis and Morley 1976) became known as 'alternative', 'natural', and later, 'complementary'.[5] And although

[5] It is interesting to note in this connection that a simple title search on 'alternative medicine' in the reference catalogue of the British Library gave 0 titles from the 1960s and earlier, 5 titles from the 1970s, 44 titles from the 1980s, 67 titles from the 1990s and already 61 titles from the first four years of the current decade. Correspondingly, the reference catalogue of the Library of Congress had 0 'alternative medicine' titles from the 1960s and earlier, 4 titles from the 1970s, 18 titles from the 1980s, 117 titles from the 1990s and 116 titles

figures are notoriously patchy and often speculative, a consensus has emerged among health researchers, regulators and practitioners alike that public interest in the alternative has taken off ever since as reflected in steady increases in numbers of users, practitioners, consultations and remedy sales throughout the industrialised world (British Medical Association 1993; Cant and Sharma 1996; Cant and Sharma 1999; Coward 1989; Eisenberg, et al. 1998; Eisenberg, et al. 1993; House of Lords 2000; Salmon 1984; Sharma 1992; World Health Organization 2002). For example, surveys among readers of the British consumer magazine *Which?* showed that the proportion of readers claiming to have used some form of alternative medicine – from herbs to acupuncture to osteopathy – rose from 14% in 1986 to 25% in 1992 and 33% in 1995 (cited in Cant and Sharma 1996), while in the United States an oft-cited study by Eisenberg et al. (1998) argued that use of at least 1 out of 16 alternative therapies increased from 34% of Americans in 1990 to 42% in 1997, a proportion that has remained more or less consistent since (Tindle, et al. 2005). By the mid 1990s, estimates ranged from about 20% to 49% of populations in different industrialised countries actively using some form of alternative medicine (Cant and Sharma 2000).

At the same time, the 1960s were also a decade where what had generally been considered the 'primitive' or 'backward' medicines of 'natives' in colonial times (see Arnold 1993; Hillier and Jewell 1983; Last, et al. 1986) came to be post-colonially known as 'traditional medicine'.[6] As these medicines successfully shed their predominantly negative colonial connotations, many newly independent former colonies experienced a traditional medicine revival that continues to this day. Countries as far apart as China, Ghana, Taiwan, Botswana, Mexico and Korea have all seen a resurgence in the practice and use of their respective forms of traditional medicine (Feierman, et al. 1992; Hong 2001; Kleinman 1980; Last, et al. 1986; Nigenda, et al. 2001; Tsey 1997). In these and many other countries, increasing numbers of Academies, Departments, Associations, Hospitals, and Institutes of Traditional Medicine have been established to advance research into and the development of medical practices based on their national cultural heritages. Increasing numbers of governments are now promoting the "safe", "effective" and "proper" practice

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from the first three years of the current decade. And finally, an 'alternative medicine' title search in the Institute for Scientific Information's Web of Science journal database (covering natural, social and human sciences) gave 165 articles from the 1980s, 667 articles from the 1990s and 776 from the first 4 years of the current decade.

[6] A simple title search on 'traditional medicine' in the British Library catalogue gave 4 titles from the 1960s, 7 from the 1970s, 50 from the 1980s, 79 from the 1990s and so far 19 from the current decade.

and use of traditional medicine as an accessible and affordable means to providing 'healthcare for all', encouraged by the World Health Organization (WHO) (2001; 2002b). Indeed, in spite of many decades of colonial and consequently developmental efforts to modernise public health delivery systems, the WHO (2002a) estimates that around 80% of populations in many so-called developing countries continue to rely on what is today considered alternative medicine in the industrialised world.

The sociology of traditional, alternative and complementary medicine

So what are all these remedies, therapies and treatments that have recently earned the titles of alternative, traditional and/or complementary medicine, and what are they complementary or an alternative to? To begin with, the distinction between traditional and alternative medicines has largely been geo-political, with the latter found in industrialised countries and the former in developing countries.[7] The term 'complementary medicine', on the other hand, could easily be used in both contexts (although it tends to be used primarily in an industrialised country context) as it was introduced about a decade after 'alternative medicine'[8] to indicate that a wide variety of therapies and treatments were not being used exclusively, but rather in combination throughout the world as users shopped around for different options to fit their individual needs (see Feierman, et al. 1992; Kleinman 1980; O'Connor 1995; Reed 2003). It is also increasingly used to indicate that many countries are gradually adopting incorporationist agendas to accommodate a 'new medical pluralism', where complementary therapies are viewed as "partners to, though different in nature from, scientific medicine" (Fulder 1996: 3). Nevertheless, it would be fair to say that, in general, medicines are traditional, complementary, or alternative *as opposed to* biomedicine, even if the boundaries between them have always been rather fluid and blurred. This, in turn, of course begs the questions of just what it is that distinguishes these medicines from modern medicine, questions that have been at the heart of the increasing attention that social scientists have paid to TM and CAM over the past couple of decades.

[7] This distinction is of course not absolute as, for example, Traditional Chinese Medicine is very popular in a number of industrialised countries, while in India the use of an 'alternative medicine' like homoeopathy is widespread.

[8] A simple title search on 'complementary medicine' gave no titles from the 1970s and earlier, with numbers increasing rapidly from the 1980s onwards (cf. footnote 5). Interestingly, use of the term 'complementary medicine' seems to be more prevalent in Europe, while 'alternative medicine' remains prevalent in America.

It is possible to identify three predominant anthropological and sociological approaches to accounting for the history of traditional, complementary and alternative medicines, all of which emphasize TMCAM/biomedicine dichotomies to varying degrees. The first relates to a personal politics of meaning, cognitive frameworks, values, cultural beliefs, metaphors, or identity, suggesting that what TM and CAM have in common is a fundamentally different view of the individual than does biomedicine, as accentuated in whole-person/ body or holistic/reductionist dichotomies. This kind of approach is often rooted in classic sociological critiques of modernity as life-enfeebling, alienating and dehumanising which is duly contrasted with the vitalizing, emancipatory and rehumanising potential of TM and CAM. Indeed, it seems quite safe to suggest that an emerging sociology of alternative medicine literature[9] in industrialised countries has often highlighted alternative medicine as a gentle, low-tech, personalised, or 'natural' approach to treating the 'whole person' and improving 'quality of life', providing an equally caricaturised foil to biomedicine (see Cant and Sharma 1996; Coward 1989; Easthope 1986; O'Connor 1995). By focusing on *why* growing numbers of people in industrialised countries are turning to alternative medicine these kinds of studies have linked the growing popularity of alternative medicine to the failures of biomedicine: practitioners of biomedicine have not been able to fully deliver on their promises of healing (especially in cases of chronic disease); their theories of illness and health have proven inadequate and no longer match up with the public's concepts of health and body; their exclusive interest in symptoms ignores the subjective experience of illness by patients; their rationalisation of the doctor-patient relation has transformed patients into passive subjects; their over-reliance on technology has taken disease out of its social context; indeed, their entire approach to health and illness has not been good enough. In other words, the modernisation of medicine has come at the cost of alienating its subject and it is alternative medicine that is in a position to remedy this by providing patients with a sense of meaning to help them cope with their illnesses, by empowering its patients into taking active responsibility for their health, and by providing them with concrete means to change their lifestyles.

[9] Although the sociology of alternative medicine is certainly a field in growth, there are to date but a handful of rigorous sociological studies on 'alternative medicine', with Coward, Cant, Kelner, Sharma, Saks and O'Connor having carried out the most comprehensive studies on the subject (Cant and Sharma 1996; Cant and Sharma 1999; Coward 1989; Kelner and Wellman 2003; O'Connor 1995; Saks 2003; Sharma 1992). Studies focusing on specific forms of 'alternative medicine' include Kelner's (1980) study of chiropractic, Saks' (1995) study of acupuncture as well as Easthope's (1986) and Frohock's (1992) studies of healing. Further to these there are a number of edited anthologies where, typically, chapters are devoted to a specific form of alternative medicine (e.g. Callahan 2002; Cant and Sharma 1996; Cooter 1988; Johnston 2004; Saks 1992; Salmon 1984; Tovey, et al. 2004).

To cite a few examples, Coward suggests that "for many, the notion of alternative is considerably more than just doing it differently from orthodox medicine. It is also a symbolic activity. It is a profound expression of a new consciousness which individuals have about health and body… involv[ing] a commitment to finding a new life style, to pursuing well-being… [and] a new consciousness of the importance of the individual in achieving health" (Coward 1989: 11). O'Connor (1995: 162-3) highlights a "patient's authoritative agency" in his or her quest for "a different cognitive framework" with which to understand and cope with illness. Leiser, in his study of patterns of belief among alternative medicine users, concludes that support for complementary and alternative medicine is "characteristic of patients with a self-aware lifestyle and a more active approach to managing their problems" (2003: 461); while Foote-Ardah has suggested that using alternative therapies is "a matter of self-regulation of treatment regimens aimed to manage everyday life by increasing personal control" (2003: 482).

In a so-called developing country context, medical anthropologists have long argued that what were often considered the superstitions of a backwards or primitive people are in fact coherent healing systems built up around complex symbolic frameworks and healing practices. What is more, following these cultures' colonial and postcolonial encounters with biomedicine and in the face of constantly changing demographics and epidemiology, recent anthropological studies of traditional medicine have come to highlight the hybrid nature of healing practice in these countries. These studies have juxtaposed "Western medicine's penetration into [the] life and consciousness" of non-Westerners with the persistence of tradition-derived or more "familiar" medical practices (Craig 2002; Janzen and Arkinstall 1978: 223). It is a heterogeneity so vividly captured in Kleinman's opening description of the clinic-lined streets of the medical neighbourhood in Taipei's Lung-Shan district, where bone-setters practice side by side with Western-trained physicians, herbalists and Chinese-style doctors (Kleinman 1980: 1-8). In an equally eclectic African context, Feierman et al. suggest that "it is quite usual… for a patient to be treated for sorcery on one day, at a hospital on the second and for spirit possession on the third" (1992: 5). Common to this diverse medical anthropological literature on traditional medicine in various parts of the world has been a focus on the multiple cognitive healing frameworks, illness episodes, and coping strategies that individual patients will operate by.

Interestingly, in spite of the medical pluralism and hybridity that is empirically accounted for in studies of the cognitive underpinnings of medicine in both Western and non-Western settings, traditional and alternative medicine are nevertheless often presented as being in opposition to biomedicine: "a full-scale criticism of the values of conventional attitudes towards health" (Coward 1989: 11), an "alternative… to expensive, possibly ineffective, and often alienating and dehumanising biomedicine" (Janes 1999: 1808), "not consonant with… the impersonal, bureaucratised mode of Western medical authority" (Janzen and Arkinstall 1978: 224) or even "a post-modern rejection of the absolute authority of medical science" (Cant and Sharma 2000: 436). However, it should be pointed out that inasmuch as these studies have argued that the modernisation of medicine (for all its spectacular technological advances) has ended up alienating and dehumanising its subject and that alternative and traditional medicines (with their focus on the whole person and the subjective and cultural experience of disease and illness) are in a position to remedy this shortcoming, then surely this leaves plenty of scope for an 'alternative biomedicine' as opposed to only alternatives *to* biomedicine. Armstrong (1983; 1984) as well as Arney and Bergen (1984) were among the first to point out how misleading the reductionist/holistic binary was in a post-WWII biomedical context. Their studies of the reconstruction of the patient's view and of medicine's subjective object in the post-war years demonstrated how a more 'holistic (bio)medicine' (a movement which has in many ways grown in parallel to alternative medicine) became possible. In other words, a concern for the 'whole person' is not somehow necessarily exclusive to non-biomedical forms of therapy – there is "no monopoly on holism" (Watt and Wood 1988: 33) – even if it is a characteristic that is often used to distinguish alternative medicine from biomedicine, not in the least by recourse to studies that show growing dissatisfaction with impersonal biomedical consultations juxtaposed against increasing appreciation of the lengthy and personal consultations that alternative practitioners are seen to provide their patients with (e.g. Sharma 1992).[10]

A second sense in which therapies or treatments have been distinguished as 'alternative' or 'traditional' relates to the question of their availability through public or private health insurance schemes (primarily in industrialised countries), their place in national public

[10] It is also relevant to point out that concerns have been voiced as to the thin line that can separate responsibility for one's health from blaming a patient for their ill health. With so much focus on personal responsibility in alternative and complementary medicine, some theorists have highlighted the potentially negative effects that this can have on particularly more 'vulnerable' patients (see Hughes 2004).

health delivery systems, and/or their degree of incorporation into national medical education and research programmes. Such approaches tend to account for the history of TM and CAM in relation to biomedicine in terms of a politics of (self-)interests between rival groups, movements or professions. Crucially, the professionalisation of biomedicine that started in most industrialised countries in the 1800s, quickly spreading to the colonies, is seen as having led to a good century's worth of (self-interested) biomedical monopoly, hegemony or domination that the biomedical profession continues to actively protect in the face of challenges stemming from the increasing popularity of traditional, complementary and alternative medicines (Cant and Sharma 1999; Dew 2003; Freidson 1970; Goldstein 2000; Saks 1995; Tillman 2002).

These studies tend to focus on regulatory aspects of TM and CAM, analysing ways in which a demand-driven new medical pluralism or state-led traditional medicine revivals are leading to concrete efforts to integrate or 'mainstream' them into national public health delivery systems. This mainstreaming is seen by some as "a direct challenge to the authority of the orthodox medical profession" (Sharma 1992: 3) or "a potential threat to the biomedical principles underpinning the activities and professional standing of medical orthodoxy" (Saks 1994: 85), while others warn that TM and CAM is at risk of being "co-opted by the medical establishment and distributed without concern for (or understanding of) possible iatrogenic consequences" (Janes 1999: 1804). The key problem for these studies from a sociology of professions perspective seems to be what it is governments, doctors, alternative therapists and traditional healers are/should be doing to respond to the growing demand/need for alternative and traditional medicine. Seeing as contemporary users of health services tend to shop around and to combine various treatments to fit their own particular situations, it is argued that governments and doctors are increasingly obliged to come to terms with this new medical pluralism and that health reforms and legislation should reflect this. On their part, alternative practitioners must correspondingly come to terms with their own growing popularity and live up to the responsibilities of accountability and liability that accompany it, e.g. by professionalising their occupations (see Cant and Sharma 1999; Dew 2003; Frank 2002; Sale 1994; Stone and Matthews 1996; Welsh, et al. 2004). In a developing country context, medical pluralism is of course not so 'new',[11] and

[11] Johnston et al. (2004) have argued this same point in a North American context, showing that even if alternative medicines have become more visible through media and popular literature in recent decades, this does not mean that people were not using them throughout the 20th century. A similar point can also be made

so studies in these settings have tended to focus on what governments should be doing to support the integration of traditional medicine into national health delivery and how the qualifications of traditional healers can be improved (see Bodeker and Kronenberg 2002; Janes 1999; Jeffery 1982; Last, et al. 1986). The term 'complementary medicine' has been especially salient in these studies as 'medical pluralism' or 'integrated medicine' appears as an ideal to be sought after since it is argued that the "further integration of orthodox and alternative medicine could bring great benefit to the consumer" (Saks 2003: 154).

Also approaching the field of alternative and traditional medicine from a regulatory perspective, a number of field studies have looked specifically at the practicalities and problems of integrating alternative and traditional medicine into conventional medicine settings like the hospital, village clinic or general practice. These studies have focused on the difficulties faced by alternative practitioners and those doctors interested in their therapies, as well as the pragmatic solutions they seek. For example, Dew's study of medical acupuncturists in New Zealand (medical doctors who practice acupuncture) found that by virtue of their being identified as 'deviant insiders' by orthodox colleagues, medical acupuncturists had to constantly negotiate the problems of "how to promote an identity which does not reject the social norms of the wider community, and how to disassociate themselves from the auxiliary traits associated with deviant acts" (Dew 2000: 1792). Another study on how Israeli alternative practitioners operate in hospital settings found "a division of labour expressed by a focusing of biomedical practitioners on the diagnosis and treatment of specific disease entities while the alternative practitioners worked in the illness context, concentrating on feelings and affective states involving the alleviation of pain, suffering and efforts to improve quality of life" (Shuval, et al. 2002: 1752). Oyebola's study of Yoruba traditional healers in Nigeria where "scientific medicine and traditional medicine co-exist" found that while professional associations for traditional healers did exist, they were not well-organised, a fact that "weaken[ed] their bargaining power with the government" in policy debates on the integration of traditional medicine into public health care delivery (Oyebola 1981: 92). And Ladinsky et al. have described what they see as a "harmonious merging of Chinese, Vietnamese and Western medical systems" (1987: 1105) in the provision of healthcare in Vietnam, at national, district and village levels where

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in a European context (see Inglis 1964). Nevertheless, the term 'new medical pluralism' does indicate that some novel initiatives and programmes emerged in many western countries in the late 20th century, a point we will return to in chapter 3.

herbal medicines and acupuncture are often used to off-set or ameliorate harmful side-effects caused by, for example, radiotherapy in cancer treatment.

Finally, perhaps the most contentious of the distinctions between traditional and alternative medicines on the one hand, and modern medicine on the other, has to do with their 'scientific evidence base', not only as regards its efficacy but also as regards explanations for this efficacy. In this sense, treatments, therapies and medicines are regarded as 'alternative' or 'traditional' in that they provide an entirely unique diagnostic and therapeutic approach to healing when compared with biomedicine.[12] For example, Coward (1989, especially Chapter 1) and Fulder (1996) have shown how alternative medicine is often contrasted to biomedicine in terms of not only its 'humanness' but also its 'naturalness', as therapies that work *with* the body as opposed to *against* it by supporting the body's self-healing abilities rather than attacking symptoms. This distinction is directly related to ecological critiques of modernity that see industrialisation and modernisation as degenerative, life-enfeebling processes which negatively impact on the balance, vitality and harmony of nature (including the body). Alternative medicine is, in this sense, again presented as the direct opposite of biomedicine and even as a potential antidote to all the harm that modern medicine has been charged with iatrogenically causing over the years. According to Coward, behind this kind of distinction lies an "intense belief in the virtues of using something in its original, 'natural' form, rather than something which has been… 'synthetically' produced" (1989: 20-1) although, as Kaptchuk and Eisenberg have pointed out, one does get the sense that "the metaphor is pliable, relative, and honorific; anything in the alternative alliance is allowed this approbation. Thus, acupuncture needles, megavitamins, and meditation are all 'natural'" (1998: 1062).

It is also a distinction that is linked to sociological and anthropological critiques of what are seen as the reductionist or limited definitions of health and illness in biomedicine. If evidence of efficacy is necessary for confirming the *legitimacy* of a therapy (e.g. in justifications for why these therapies and treatments should or should not be available to the public) then, it is argued, it is necessary to broaden biomedicine's reductionist

[12] In this kind of distinction the term 'complementary medicine' suggests that some therapies do not necessarily provide entirely unique diagnostic and therapeutic approaches but rather can be used to complement, for example, a biomedical approach in a supportive fashion (see, for example, Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000).

definitions of efficacy. There are in effect two central points to the debate over whether there are/should be fundamental distinctions between different therapies when it comes to their efficacy, as well as explanations hereof. Firstly, a number of social scientists argue that the concepts of health, illness and the healing process found in alternative and traditional systems of medicine are fundamentally and epistemologically different from those utilised by biomedical practitioners. And although there is debate about the extent to which different alternative and traditional therapies share the *same* concepts, there has been a tendency to generalise in terms of binaries like natural/synthetic, holistic/reductionist, healing support/symptom-busting or whole person/body when distinguishing between TMCAM and biomedicine (see Fulder 1996).

Secondly, mechanistic biomedical concepts of pathology and dysfunction are often counterposed with vitalistic notions of imbalance or 'blocked energy flows' (see Kaptchuk 1983; McIntyre 1988). Such definitions of health, illness and the healing process are of course reliant on the highly contested concept of efficacy, as they indicate both the pathways of healing (e.g. neurochemical receptors, *qi*-energy meridians or the psyche) and the desired outcomes of the healing process (e.g. balance, well-being, ability to cope, or biological normality). This debate tends to be highly polarised, with one side arguing that without plausible *biological* pathway explanations, any beneficial effects resulting from an alternative or traditional therapy can only be understood as a placebo response, and the other arguing that there is more to health than biology, for example, quality of life, balance, sense of well-being and ability to cope which can all be influenced and shaped by "pathways of words, feelings, values, expectations and beliefs" (Kleinman 1973: 210).

And finally, a number of studies, often citing a kind of Kuhnian incommensurability, have also questioned whether or not traditional and alternative medicines can/should be tested using scientific methodologies such as the randomised controlled trial that are seen as ideological by some and objectively neutral by others. Stone and Matthews, for example, suggest that, "certain aspects of the practice of complementary medicine are simply not amenable to proof" (1996: 6). Similarly, Cohen has argued that alternative and complementary medicines "may challenge legal and medical structures that are based entirely on scientific measurement, justification and validation" since these forms of therapy are often "not fully measurable through conventional scientific epistemologies" (1998: 116-17). Kopelman, on the other hand, argues that "[t]herapeutic interventions, by

virtue of being called therapies, need to in fact help, not harm, or help more than harm patients or clients, creating a duty to test… using either the best available methods or the same methods used to test conventional therapies" (2000: 44, 36). Parker concurs, arguing that while it may well be that "in a world of pure postmodern particularity and choice, no perspective would command greater epistemic authority than another, and there would be no way of choosing critically between different healthcare modalities, distinguishing better from worse educational courses, or distinguishing competent from incompetent healthcare practitioners[;] the only way we can make these choices is through scientific assessment" (2003: 317). And finally, Angell and Kassirer are adamant that "there cannot be two kinds of medicine – conventional and alternative. There is only medicine that has been adequately tested and medicine that has not, medicine that works and medicine that may or may not work" (1998: 841).

The debate is far from over and it seems to be moving towards more pragmatic grounds with attempts at suggesting more 'appropriate' scientific methodologies for testing alternative and traditional medicines to reflect their different therapeutic objectives (e.g. Lewith, et al. 2002). Thompson argues that, at the end of the day, the efficacy debate boils down to:

> 'What evidence?' and 'Whose evidence?'. These are the very questions that have been and will continue to be highly contested… They are questions that always emerge when incommensurable truth claims meet and the framework for adjudicating these differences eludes us. (Thompson 2002: 61-2)

And so, to sum up, while it is almost customary to acknowledge an incredible diversity in the different forms and types of alternative and traditional medicines,[13] an emerging sociology of complementary, alternative and traditional medicine has nevertheless tended to view these therapies *en masse* as indicated by the popular abbreviations of TM

[13] It is difficult to provide an all-inclusive list of such therapies, but for the sake of illustration a recent report from the United Kingdom's House of Lords Select Committee on Science and Technology mentions Acupuncture, Chiropractic, Herbal medicine, Homeopathy, Osteopathy, Alexander Technique, Aromatherapy, Bach and other flower remedies, Body work therapies (including massage), Counselling stress therapy, Hypnotherapy, Meditation, Reflexology, Shiatsu, Healing, Maharishi Ayurvedic Medicine, Nutritional medicine, Yoga, Anthroposophical medicine, Ayurvedic Medicine, Chinese Herbal Medicine, Eastern Medicine (Tibb), Naturopathy, Traditional Chinese medicine, Crystal therapy, Dowsing, Iridology, Kinesiology and Radionics. These are then sub-divided in the report into Professionally Organised Alternative Therapies, Complementary Therapies and Alternative Disciplines (Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000).

(traditional medicine) or CAM (complementary and alternative medicine). As such, TM and CAM are often portrayed as being in direct opposition to a hegemonic, reductionist and synthetic biomedicine, as something to be (complementarily) integrated into otherwise discriminatorily biomedical health delivery and insurance systems, or as operating according to fundamentally different concepts of health, illness and the healing process (a good part of which are shared across the spectrum of different treatments and therapies) that are not necessarily amenable to scientific proof. At the same time, it also seems fair to conclude that this relatively new field of sociological research has its roots in an unabashedly activist social research agenda that played a significant role in diagnosing a crisis of modern medicine while simultaneously promoting an alternative (bio)medicine. The sociological work done so far on TM and CAM has mostly chosen to cast the fields in terms of a hegemonic biomedical approach, which for many years was able to successfully reject 'fringe' or 'primitive' medicines but that is now under increasing pressure as more and more people look to TM and CAM in their quests for healing. As Cooter has put it, "the hegemony of the 'church [of medicine]' begins to look more fragile and less absolute" (1988: xiii). A fragility that has been more than encouraged by the sociological shift away from studying 'fringe', 'marginal', 'primitive', or 'quack' medicines towards studying TM and CAM that started in the 1960s. Indeed, Goldstein has gone as far as to suggest that "the growing acceptability of alternative medicine reflects the success of medical sociology" (2000: 295).

From why to how – doing a history of present herbal healing practices

It seems, then, that while sociologists have carried out numerous critical studies of biomedicine – demonstrating its historicity, slating its limitations, and questioning the legitimacy of its monopoly – surprisingly little critical sociological attention has been paid so far to the conditions of possibility that allow complementary, alternative and traditional medicine to succeed where it is claimed that biomedicine has failed (and by critical attention I do not mean the kind of sceptical belittling of these modes of therapy that is in no short supply in contemporary debates on alternative medicine). To be sure, a lot of the more recent sociological studies of complementary, alternative and traditional medicine have done much to unsettle the standard history of alternative and traditional medicine discussed above. McClean, for example, has shown how spiritual and crystal healers "infuse their practice with some of the language and science of biomedicine… throw[ing]

into question the conventional biomedicine/alternative medicine interface" (2003: 483), seconded by Tovey et al. (2004: 2) who have argued that:

> we should not fall back on the conventional picture that presents CAM versus orthodox medicine as the key to understanding CAM. Neither orthodox medicine nor CAM is a monolith. There are disputes and boundary claims being made both within orthodox medicine and within CAM. Not all medical practitioners agree on what constitutes the alternative or the complementary.

And Johnston et al. have also "challeng[ed] the notion that the entire regime of alternatives was frozen in social and intellectual disrepute" (2004: 2) in the period leading up to the alleged late 20th century renaissance of alternative medicines.

Nevertheless, it is my contention that the bulk of contemporary sociological research continues to approach the field by asking *why* alternative medicine? As important as this research has been to date, rather than continuing hitherto research into why growing numbers are turning to (or indeed why consistently high numbers have turned to) complementary, alternative and traditional medicine, why a powerful medical establishment continues to subjugate these therapies, why biomedical concepts of health and illness are inadequate, or why alternative and traditional medicines are not being sufficiently integrated into national health delivery systems, I propose here a critical examination of the normative grounds of a specific form of alternative and traditional medicine, namely herbal medicine, as practiced in Vietnam and the United Kingdom respectively. That is to say, a critical history of the present *how* of herbal medicine in these two countries. In doing so, I hope to look past the dichotomised portrayal of TM and CAM as holistic, natural, traditional, subjugated, Eastern, empowering or people-centred on the one hand and biomedicine as reductionist, synthetic, modern, hegemonic, Western, 'deadening' or impersonal on the other, in favour of seeing how a whole range of different rationalities and practices come into play in contemporary efforts to heal with herbs.

Far from setting out to uncover some kind of a failure, fallacy or deception, whether on the part of biomedicine or TMCAM, or indeed to highlight any comparative advantages that one form of healing might have over another, the kind of critical analysis I am proposing here will approach herbal medicine as the *problem* that it is, or more accurately, as the *field of problematisation* that it is. For healing is an inherently problematising activity

(regardless of whether it is conventional, alternative, new age or traditional) requiring practices of diagnosis, treatment, validation and regulation, yet always surrounded by practices of resistance, contestation and defiance, and always invoking/producing certain bodies of knowledge in the justification and codification of these practices. As I will argue in the following chapter, such an approach should be seen as distinct from those reviewed above that tend to account for the history of traditional, alternative and complementary medicine in terms of either a personal politics of meaning, values, beliefs or identity; a politics of (self-)interests between rival groups, movements or professions; or a politics of epistemologically-incommensurable healing paradigms.

What makes approaching herbal medicine as a field of problematisation different? It was noted before that the task of social scientists in the field of medicine has been described as one of questioning, evaluating and assessing the appropriateness of definitions of health and the adequacy of healthcare delivery systems. In contrast, approaching herbal medicine as a problem is to turn the tables by investigating just how such evaluations and assessments are made feasible and how concepts of safety, quality and efficacy come into play in the codification, justification and organisation of herbal healing practices. The purpose of this study will therefore not be to assess whether herbal medicine is better or worse than biomedicine, nor will I attend to the (in)justices of how it has been both promoted and discouraged through the past decades in both countries. Rather, since my point is that notions of what is 'good' as opposed to 'bad' medicine is integral to any form of healing, I will be analysing the practices that enable such distinctions today, as a means to historicise and unsettle them, and to demonstrate their unavoidably contingent and normative grounds. In the same way that there is 'good' and 'bad' biomedicine, there is 'good' and 'bad' herbal medicine, as will become clear.

But what is herbal medicine and how is it relevant to such a study of alternative and traditional medicine as I am suggesting here? Generally speaking, herbal medicine is a catch-all phrase used for a wide range of practices, therapies and elements of therapies that come from all over the world, including medical herbalism, traditional Chinese medicine, herbology, phytotherapy, medical botany and Ayurvedic herbal medicine, which all have the identification and use of plants (or parts of plants) for therapeutic effect in common. Its claims of a 'natural' and 'whole person' approach to healing today relate to both the life-enfeebling and the soul-battering side effects of modernisation and industrialisation. Yet,

although it is sometimes argued that it constitutes a complete alternative to modern medicine, research into contemporary practice and use suggests that this is not the case. On the other hand, while it is often commented that medicinal practices in Asia, Europe, Africa, America and Australasia were all originally developed on the basis of the healing properties of plants, the practice of herbal medicine has been marginalised and discouraged to varying degrees in the majority of countries in the past centuries. This has certainly been the case in both the United Kingdom and in Vietnam where I will not only be analysing overall problematisations of herbal medicine, but also concrete efforts to have two herbal remedies, St. John's Wort and Heantos, approved and improved for safe and effective use by the public.

The rationale for deciding on these two remedies in these two distinct national settings is fivefold. To begin with, choosing two *herbal* medicines will allow me to investigate what kind of role both the life-enfeebling and the soul-battering critiques of modern medicine have played in the recent renaissance of this particular form of traditional, alternative or complementary medicine in both countries. Secondly, they are both promoted as targeting illnesses of the mind (mild to moderate depression and drug addiction respectively) and, as we will be seeing, scientific research into their mechanisms of action has led to a fascinating meeting between these 'natural' remedies and cutting edge neuroscience. Thirdly, the modernisation of St. John's Wort and Heantos into industrially-produced herbal medicinal products through the 1980s and 90s has in both cases been a typically global endeavour with a curious, yet not entirely fortuitous convergence in Germany. Fourthly, while the modernisation of St. John's Wort (a single plant species) began as a search for single active ingredients to explain its efficacy, Heantos is made out of thirteen different plants with scientists questioning whether or not a single active ingredient approach would be the most appropriate, providing me with insight into one of the most salient debates in the field of herbal medicine today. And finally, analysing the ways in which herbal medicine has been problematised in both an industrialised country of the West and a developing country of the East will allow me to address the oft-invoked distinction between an exotic, almost mystical Eastern medicine and a rational, Western medicine that is doing all it can to struggle against such 'superstitions'.

Even a brief look at what has been happening with herbal medicine in the past four decades or so in Vietnam and the United Kingdom provides a staggering panorama of a whole

complex of new regulations, toxicity tests, clinical efficacy trials, scientific research programmes and standardised production procedures, centred on the key problems of safety, quality and efficacy. Previously rejected as 'fringe medicine' or 'quackery', Vietnamese and British herbal remedies are increasingly being mobilised and regulated according to their evidence bases as their sanctioning and legitimacy becomes dependent on the rigorous safety and efficacy trials that are currently favoured in biomedicine. At the same time, however, critics of biomedical notions of safety and efficacy continue to call for a rethinking of the patient, rejecting a view of him or her as one who 'merely lodges the disease' in favour of a view of the 'whole person' where safety and efficacy are linked not just to symptom-based measures of health but also to quality of life and balance. Herbal medicine patients are not 'merely' to be treated for certain health conditions, they are also to be activated out of passive roles as recipients of healthcare, 'responsibilised' into leading healthier lifestyles, provided with a framework of meaning for understanding and coping with their illnesses, and encouraged to actively improve their personal well-being and self-appraisal by taking charge of their lives. And finally, practitioners' qualifications are increasingly being scrutinised with calls for a standardisation of competency criteria and the establishing of registers or licensing systems. Hence, it would appear that what the birth of 'alternative medicine' and 'traditional medicine' has marked is a transformation of the ways in which 'quackery' is thought about and regulated against in these two countries, as well as an inauguration of new objectivities and subjectivities, as novel configurations – or *dispositifs* – of biomedical, anthropological, psychological, vitalistic, and neo-vitalistic rationalities and practices of healing come into operation.

To guide this history of contemporary herbal healing practices I have chosen the following research questions which concern the different ways in which herbal medicine in Vietnam and the United Kingdom is regulated, validated and used.

- How has it become possible for 'primitive' and 'quack' treatments in a Vietnamese setting and 'fringe' and 'marginal' treatments in a British setting (e.g. herbal medicine) to be recast into 'traditional', 'alternative', and/or 'complementary' medicines?

- How has the concept of 'efficacy' been deployed in contemporary Vietnamese and British herbal treatments?

- In which ways have herbal medicine users come to be objectified as 'whole persons' in Vietnam and the United Kingdom?

Histories of the present that seek to interrogate the normative grounds of contemporary healing practices can be made feasible with the help of the two strategic methodological pillars of *archaeology* and *genealogy* that have been refined over the years by such scholars as Bachelard (1984), Canguilhem (1989), Foucault (1977; 1985), Corbin (1990), Darnton (1968), Donzelot (1980), Rabinow (1989), Rose (1999) and many others. Where archaeology can help is in showing how truth about the efficacy or inefficacy of herbal medicine, the competent or incompetent herbal practitioner, and the toxic or safe herbal medicinal product is produced. That is to say, an archaeology of the bodies of knowledge that are invoked when the effectiveness of herbal medicine is put to the test, when the qualifications of herbal practitioners are evaluated, and when the remedies of herbal medicine are controlled for quality, will help us to recognize some of the *objects*, *concepts*, and *norms* that codify, organise and justify the practices of herbal medicine today. Genealogy on the other hand, can help us to see how individuals are transformed into *subjects* through practices of herbal healing that provide them with particular ways of relating to and understanding themselves, thereby making available a whole range of self-forming practices or what Foucault refers to as forms of *ascesis*. It is with this interplay and overflow between modes of knowing (the remit of archaeology) and modes of doing and being (the remit of genealogy), between objects and subjects, that *histories of the present* are concerned, and as Foucault has suggested, one might summarise the endeavour to describe the problematisations and practices that are made possible by these interlinkages as studies of "how men govern (themselves and others) by the production of truth" (Foucault 1991: 79).

How to read this dissertation

The following chapters contain an analysis of how the problem of herbal medicine has played out in a Vietnamese and a British context during the past five decades or so, with a view to situating two decades worth of efforts to have St. John's Wort and Heantos approved and improved for use, and to understanding how herbal medicine has contributed to the making up and managing of subjectivities in these two countries. Chapter 2 starts out with a discussion of how one might study some of the practices of regulation, validation and use that make up the field of herbal medicine today in terms of a field of

problematisation. In particular, the chapter distinguishes the social study of *dispositifs* from ethnography, policy analysis, science and technology studies, and histories of ideas, and highlights methodological and research design considerations. The chapter also identifies interrelations between modernity, normalisation, governmentalisation, disciplines and subjectivities as consistent themes for the chapters that follow.

The formation of the five chapters of analysis that make up the substance of this dissertation has been guided by my three key research questions. Each question concerns controversies surrounding: how to protect people from *quackery*; how to determine the safety and *efficacy* of a herbal treatment; and what kind of *life* herbal medicine is seen to be optimising in the two countries under study. Chapter 3 investigates the conditions that have allowed for the mobilisation of TM and CAM in Vietnam and the United Kingdom in the past few decades. The chapter suggests that the transformation of 'primitive medicine' into TM in postcolonial Vietnam and the recasting of 'fringe' or 'marginal medicine' into CAM in late 20th century Britain has relied on an internalisation of the kind of dividing practices that previously were used to distinguish biomedical from non-biomedical forms of therapy into a plurality of therapies. This recasting has in turn reconfigured the way in which quackery is conceptualised and regulated against in the two countries. Chapter 4 picks up on this internalisation as pertains the practice of Vietnamese and British herbal medicine since the 1960s, arguing that the normalisation and regularisation of the production, practice and use of herbal medicine has relied on a kind of bio-politicisation which has worked to ensure that herbal medicine contributes to rather than hinders public health.

In chapter 5, the highly contested concept of efficacy is analysed in the context of recent efforts to validate the safety and efficacy of the two prominent herbal remedies – St. John's Wort and Heantos. The chapter starts with a Canguilhemian-style archaeology of the theory of 'symbolic efficacy' as formulated and adapted in a number of classic medical anthropology texts. The chapter argues that medical anthropology has played a pivotal role in what has been a 20th century decriminalisation of placebo, circumscribing placebo efficacy as a kind of spill-over effect from a symbolic, cognitive realm into a corporeal, bio-physiological realm. Chapter 6 continues the analysis as pertains the search for 'plausible' mechanisms of action to explain the clinical effects of St. John's Wort and Heantos. In particular, the chapter shows how the search for plausibility has involved often innovative collaborations between herbalists, pharmacologists, neuroscientists and

phytochemists. The analysis suggests that debates between 'vitalist' and 'rationalist' theories of biology are alive and well in the pharmacology laboratories that work to modernise and standardise St. John's Wort and Heantos.

The question of what kind of life herbal medicine is seen to be improving is addressed in the final chapter of analysis. Importantly, chapter 7 argues that with the consolidation of modernisation critiques during the course of the 20th century, relations between 'life itself' and 'human subjectivity itself' have come to be reconfigured such that both form therapeutic sites of life optimisation. As such, bio-power in Vietnam and the UK today operates around the biological task of optimising and disciplining bodies and populations, while also making possible the optimisation of human subjectivities via a range of grassroots techniques of coping in a kind of neo-vitalisation of quantity with quality of life. Herbal medicine in both Vietnam and the UK has been mobilised to address some of the many perceived side effects of 'our modern way of living' – including depression and addiction. The chapter analyses how the said neo-vitalisation of life has made an entire host of techniques of the self available to both Vietnamese and British subjects, albeit in very different ways and with very different outcomes. It argues that a govenmentalisation of individual and collective lifeworlds has been a requisite part of the mobilisation of herbal medicine in both countries.

And so it is with this structure in mind that this dissertation should be read. While the analysis of the three different controversies might seem somewhat isolated in relation to each other, taken together they all contribute in very specific ways to the task that I have set myself, which is that of accounting for the late 20th century revival and renaissance of traditional herbal medicine in the United Kingdom and Vietnam. As will become clear in the following, such an account cannot help but delve into the contestations and controversies that have surrounded quackery, efficacy and life.

2 Histories of the present

There is a clear distinction to be made between approaching a field such as alternative and traditional medicine with a view to establishing a myth, an injustice, an advantage or a failure, and an approach that seeks to locate the rationalities and practices – the thought spaces – that make different forms of medicine feasible at a certain point, in a certain place. I am neither herbalist, clinician, regulator, pharmacist, chemist, community worker, herbal medicine user, pharmacologist nor doctor, and I will do well to leave the former approach and the important questions it raises competently in their hands, at their risk, and to their credit (cf. Canguilhem 1989: 34). Rather what I am is a social scientist with an intense curiosity about our present; its conditions, its possibilities, its liabilities. In particular, I am a sociologist preoccupied with one of the most important hypotheses to have formed out of the relatively short history of my discipline, namely that modernity has been a degenerative, dehumanising, ossifying, repressive, and/or disorienting force on societies and the individuals they comprise.

It is both from within and against these sociological diagnoses of modernity's many side effects that I will be embarking on my inquiry into the revival and renaissance of herbal medicine in Vietnam and the United Kingdom. On the one hand, as we will see, there can be no question that herbal medicine in both countries has in recent decades been proposed as an antidote to the physiological and subjective pathologies that 'a modern way of life' has been charged with engendering: traditional remedies for modern woes. Yet on the other, if one does not ascribe to the theories of vitality and subjectivity that underpin such diagnoses but rather approaches these theories as modern artefacts on a par with the 'reductionist' economic theories that have long been seen to power processes of modernisation and industrialisation, then the critical task becomes one of demonstrating both the practicality and the historical contingency of the novel herbal *dispositifs* which have emerged in both countries to problematise and/or facilitate the said revivals.

As such, what follows is not so much a definitive study of Vietnamese and British herbal medicine as a comparative inquiry into what the past few decades of efforts to modernise, rationalise and normalise the practice, production and use of herbal medicine in these two

countries can tell us about our present.[14] That is to ask, what can these efforts tell us about the ways in which the public is to be protected from dangerous practitioners; about the forms of validation that establish whether or not a medicine is safe and efficacious; and about the pathologies our bodies and subjectivities are seen as prone to, as well as the *techne*, *ascesis* and *phronesis* (i.e. the very practical forms and ways of working on ourselves) that are both available to and required of 'whole person' herbal medicine users in the care of their selves and their lives today? To address these questions I will be drawing upon work done by Bachelard, Canguilhem, Foucault, Rose, Rabinow and Hacking in particular. Common to the work of these authors has been an empirically rigorous interest in the interrelatedness, indeed inseparability, of thoughts and practices. In this chapter, I will set out some of the key theoretical and methodological considerations that have helped me assemble and pursue a research strategy geared at accessing herbal *dispositifs* in Vietnam and the UK.

Bachelard, Canguilhem and the historicity of objectification

To approach herbal medicine as a field of problematisation is of course to build on a solid base of research that has sought to analyse a wide range of social problems in many different contexts, including crime, families, prostitution, poverty, development, and the self (Corbin 1990; Donzelot 1980; Escobar 1994; Foucault 1977; Rose 1999). It is an approach that seeks to unsettle and trouble the various self-evidences, givens and convictions that underpin contemporary efforts to heal with herbs in Vietnam and The United Kingdom; not with a view to break them down, expose or replace them, but rather to take them at face value by exploring the conditions of their possibility through an archaeological interrogation of their normative grounds and objectifications, as well as a genealogical investigation of their modes and effects of subjectification. When modern or herbal medicine claim a superior efficacy, on what grounds do they do so: what claims to truth are invoked and for what kind of subject? Such a history of present ways of doing and knowing herbal medicine is critical, not suspicious, of these normative grounds in the sense that it seeks to demonstrate the historical contingency of the bodies of knowledge, ways of doing, and modes of being that make herbal medicine feasible, suitable or dangerous at this particular moment in the two countries under scrutiny. In other words, it is an approach that

[14] For comprehensive contemporary studies of Vietnamese herbal medicine see Hoàng et al. (1999), Craig (2002) and Marr (1987), and for studies of British or 'western' herbal medicine see Griggs (1997), Mills (1993), O'Sullivan (2005) and McIntyre (1988).

works to establish the historicity of the objects and subjects of herbal medicine by approaching it as an ensemble of interlinked practices, acts and thoughts.

The relations between ways of knowing and ways of doing have been central to Bachelard's (1984) notion of phenomenotechnology in his studies of what he saw as the "technical activity" of thought carried out by chemists and physicists in their laboratories, and to Canguilhem's (1989) work on the role of biological concepts (e.g. of the normal, the pathological, the reflex, regulation) in biological experimentation. In setting out to characterise *The New Scientific Spirit* that organised the new sciences of non-Euclidian geometry, quantum mechanics and relativity, Bachelard proposed to "examine the fundamental metaphysical question of the reality of the external world in terms of scientific practice" (1984: 10). For Bachelard, realism and rationalism were not to be taken as opposites, rather each scientific experiment had to be approached as both a demonstration and an application so as to reduce "the gap between explicated reality and applied thought" (ibid.). His point being that some form of thought was intrinsic to any scientific practice; it was not a case of abstract hypotheses vs. real experiments, rather "to the extent that hypotheses have been linked to experiment, they must be considered just as real as the experiments themselves – they are 'realized'" (ibid.: 6).

According to Bachelard, "the only way to achieve objectivity is to set forth, in a discursive and detailed manner, a method of objectification" (ibid.: 12), and as a result it was the task of the historian of science to map out the historicity of such systems of objectification. However primitive or given, objectivity "is something that is learned with great difficulty" (ibid.: 11), and, indeed, one should be humble enough to recognize that its pursuit is an always unfinished and endlessly transforming task (cf. Gadamer 1996). As such, scientific development was not so much a linear progression as a series of epistemological ruptures, rectifications and breaks, often against the odds (or epistemological obstacles) that common sense and conformist thinking placed in its way (Bachelard 2001; see also Gutting 1989). Epistemology, for Bachelard, was historical and for this reason it was necessary to demonstrate how even those systems of objectification which might seem somehow outdated or even 'primitive' to scientists today, in fact had their own empirically-grounded forms of logic in their day.

It is this sense of a historically locatable inseparability of 'realisations of the rational' from 'rationalisations of the real' that Canguilhem would take into his analyses of the formation (through biological experimentation) of various and often competing theories of the relations between the normal and the pathological. For Canguilhem, it was the *concept* that was crucial in the development of methods of objectification for the very practical 'work' that it performed, not just in developing certain codes of observation or conventions of experimentation, but also in making experimentally-observed phenomena intelligible and practicable. Indeed, it is these concepts that are necessary for the emergence of particular ways of knowing or 'styles of reasoning' (Hacking 2002) about, for example, health and illness. In his classic "Essay on some problems concerning the normal and the pathological", Canguilhem (1989) contrasts a way of thinking which sees illness as the direct effect of either excesses or deficiencies in physiological phenomena and health as the restoration of these variations to normal levels (as Claude Bernard put it "there are only differences of degree" between health and illness), with one in which health is the capability of organisms to tolerate and/or adjust to infractions or deviations from habitual norms, and in doing so to instigate new norms. In this latter view, illness is not so much a deviation from the normal as an inability to adapt to physiological changes, whether internally or externally induced (see also Gutting 1989: 46-8).

Thought spaces – when a form of rationality/system of practices is but one among many

For Foucault, this crucial insight into how historically contingent ways of thinking were intimately intertwined with ways of doing was in no way confined to the laboratories of chemists, physicists and pathologists where concrete problems were tackled through experimentation. Instead, such an approach could also be innovatively applied to studies of how social problems were tackled in the poor houses, hospitals, infirmaries, schools, barracks, workshops and prisons of social workers, doctors, pedagogues, wardens and managers. Crime, illness, prostitution, idleness, poverty, etc. Foucault argued, are social problems which become both intelligible and amenable to intervention through certain historically contingent *dispositifs* understood as "resolutely heterogeneous grouping[s] composing discourses, institutions, architectural arrangements, policy decisions, laws, administrative measures, scientific statements, philosophic, moral and philanthropic propositions; in sum, the said and the not-said" (Foucault, et al. 2003: 11). And, in the same way that Bachelard and Canguilhem showed how epistemologies were historical,

throughout his work, Foucault (1967; 1973; 1977; 1978) empirically demonstrated the historicity of the regimes of practices that epistemologies both fostered and depended on in a social arena.

Drawing on such an approach, the task of historians of social practices becomes one of making sense of what might appear as oddities, absurdities or even atrocities from the point of view of current ways of thinking (e.g. giving sufferers of hysteria cold baths, torturing bodies as public spectacles, rounding up 'degenerates' into poor houses) by locating these practices within the systems of thought or ways of thinking which organised and gave credence to them. That is to say, for every set of historically locatable healing, punitive, or reformative practices there are interrelated medical, penal or pedagogical gazes or grids of intelligibility/visibility which provide more or less circumscribed logics to them. This is not to say that *dispositifs* comprise a neat and orderly set of corresponding rationalities and practices, rather, within them, a multiplicity of rationalities and practices meet, interact, and come into tension in attempts to address very concrete, practical and 'messy' problems. And one can be sure that for every 'success' claimed there will be 'failures' derided, as has so clearly been the case in 20th century medicine. It is this sense of a de-exoticising of the odd and peculiar that can help us trouble the givens and self-evidences of today, for if there is a rationality to the 'odd' practices of, say 19th century doctors, then surely there is an oddity to the 'rational' practice of medicine today. And so the task of historians of the present becomes one of making the commonsensical, the taken-for-granted appear odd.

In the context of my study of herbal medicine, it is a *dispositif* of practitioner associations, safety and efficacy legislation, institutes of drug quality control, herbal self-help manuals, practitioner training programmes, clinical trials, phytochemical elucidations, pharmacology laboratories, health promotion programmes, internet communities, and much more that will be the object of my research, in both of the countries I have chosen. And what links this heterogeneous grouping together in these countries are certain arrangements of grids of perception and prescription that make space for a whole set of assessing, diagnostic and prognostic judgements, which in turn provide the normative bases, justifications and rules for ways of conducting the conduct of others (herbal practitioners, producers of herbal remedies, herbal medicine users) and of ourselves (as 'whole persons', responsible herbal remedy producers, qualified practitioners) (see Foucault 1991). The point to be made, as will become abundantly clear in the chapters that follow, is that the problematisation of

herbal medicine takes place within a thought space, or better yet, within an array of thought spaces, where ways of thinking (rationalities) are inseparably linked to ways of doing (regimes of practices). It is within such thought spaces that suitabilities of means to ends are formed, reformed and transformed.

Now, where Weber, Habermas and many other sociologists have seen in rationalisation and modernisation processes that have teleologically introduced administrative and economic forms of systematised organisation of action into almost all corners of society, Foucault, Canguilhem, Rabinow, Rose, Dean and others have instead asked what forms relations between ways of thinking and ways of doing have come to take that we can speak of them as modern. In this latter sense, *modernity* is not so much an epoch or an age, nor a destructive force of ossification, alienation, repression, anxiety or disorientation. Instead it is an 'attitude of mind'; a mode of relating to contemporary reality which values, indeed 'heroizes' the present with "a desperate eagerness to imagine it, to imagine it otherwise than it is, and to transform it not by destroying it but by grasping it in what it is" (Foucault 1997b: 311). There is not one form of Rationality that is somehow representative of modernity. Rather, as an attitude of mind, modernity allows for numerous (sometimes overlapping, sometimes contradicting) rationalities and systems of practices to emerge, flourish, transform or fall into disrepute (see Dean 1994, especially chapter 4). There are not just methods of objectification in the so-called 'hard' and life sciences, these are also found in the human and social sciences. It is the expert bodies of knowledge (even pockets of knowledge or sub-theories within these) that emerge out of all of these various methods of objectification which make claims to truth in a battle to establish epistemological authority, to surpass certain epistemological thresholds. Some knowledges never quite attain such veridical authority however persistent (e.g. mesmerism, phrenology or spiritism), while others, having initially achieved it, lose out in the face of sustained challenges (e.g. social evolutionism, humoral medicine or psychoanalysis), and still other so-called 'popular' or 'folk' forms of it never having achieved sufficient 'formalisation' to allow them to stake their claims other than in certain localised contexts[15] (see Moreira 2000; Triantafillou and Moreira 2005). These games of truth are far from globally universal and often have their unique trajectories and particularities in different geo-political

[15] Although we will be seeing later how during the course of the 20th century various ethno-sciences emerged as sub-disciplines with the explicit remit of rescuing and formalising these, often hitherto undocumented, 'folk' or 'popular' forms of knowledge.

localities and socio-cultural settings no matter how 'globalised' a world we have come to live in, as we will be seeing.

Nevertheless, while modernity in this sense can easily encompass a multitude of interweaving and sometimes competing grids of intelligibility (rationalities) and regimes of practices, there have been certain *forms of relations* between ways of knowing and ways of doing that can be linked to a modern attitude of mind. It is these forms of relations between knowledges and practices that Foucault sought to capture with the term 'governmentality' (see Burchell, et al. 1991). It is a form of relation where the government of individuals and populations came to rely specifically on the building up of expert bodies of knowledge – disciplines – which have in turn provided grids of perception and prescription for the conduct of the conduct of these individuals and their aggregates. That is to say *discipline* as an expert branch of knowledge (biology, psychology, economics, anthropology, sociology, etc.) and as a form of instructing, educating and training. And so where many have suggested that modernity has been characterised by the rise of the nation state and a kind of statisation and rationalisation of society, Foucault and others have suggested that it is more a kind of *governmentalisation* of the state/statecraft – the building up of particular ensembles of institutions, procedures, analyses, and reflections informed by expert bodies of knowledge – that has emerged out of the particular mode of relating to contemporary reality that we have come to know as modernity (see Barry, et al. 1996).

It is also a form of relation where concepts of the norm and normal have played a kind of mediating role in the formulation and execution of normative projects. Just as it has been through the study of the pathological that we came to know the normal in biology, it is through the systematised accumulation of knowledge about certain circumscribed social problems and deviations that we come to know the normal as well as the norms that stabilise and indicate it in social contexts. If "a norm is that which can be used to right, to square, to straighten", Canguilhem argued, then "to normalise, is to impose a requirement on an existence, a given whose variety [and] disparity with regard to the requirement, present themselves as a hostile" (1989: 238). It is to the re-alignment of such hostilities that *normalisations* (of, for example, the technical means of education, health, economic development, etc.) are addressed as a way of achieving normative goals that are considered 'for the good'. For example, as an effect of modern attempts to secure the 'health, wealth and happiness' of individuals and populations, Foucault (1978) famously argued that the

governmentalisation of life over the past few centuries resulted in the formation of what he called the two poles of bio-power – an anatomo-politics of the body and a bio-politics of the population. While the first is directed towards the disciplining and normalising of individual bodies as a means of enhancing their capacities, extorting their forces and securing certain distributions of them, the second is geared towards the regularising and normalising of aggregated mortality rates, birth rates, life expectancy statistics, etc. In the following analysis we will see how the concept of bio-power, as well as the normalisations and governmentalisations of life that have allowed for it to operate, can be helpful in my task of accounting for the revivals of herbal medicine in the United Kingdom and Vietnam, albeit in significantly reconfigured ways.

Subjectivities – when modes of knowing overflow into modes of being

As might be guessed from my introduction, further to the normalisations and governmentalisations that have facilitated modern forms of intervening, it is the subjectivities that have emerged from the assemblages of problematisations in the fields of British and Vietnamese herbal medicine – is it safe, does it work, what does it do – that will form another one of the *leitmotifs* of my analysis. For, not only has modernity been characterised by particular forms of relations between rationalities and systems of practices, it has also engendered particular forms of interlinkages between modes of knowing and modes of being. Such relations can be usefully characterised and described with the help of a Foucauldian understanding of ethics in the sense of particular ways of relating to, understanding and working on oneself (Foucault 1978; 1985; 1986; Foucault and Rabinow 1997). Indeed, there has in recent years been a growing field of Foucauldian-inspired research into the ethics of modernity, including Rose's accounts of the role of 20th century *psy*-disciplines in the inventing and managing of our selves (Rose 1996b; 1999), Rabinow's writings on *anthropos* today (Rabinow 1996; 2003), as well as Hacking's work on the looping effects of human kinds in the making up of people (Hacking 1995; 2002).

In articulating how one might carry out a genealogy of modern modes of subjectification, Rose (drawing on Canguilhem) has argued that in the past few centuries, "vocabularies and techniques of the person, by and large, have not emerged in a field of reflection on the normal individual, the normal character, the normal personality, the normal intelligence, but rather, the very notion of normality has emerged out of a concern with types of conduct, thought, expression deemed troublesome or dangerous" (1996b: 26). While Rose's work on

a genealogy of subjectification has specifically engaged with the role of the psy-sciences in building up certain ways of thinking about human beings, as well as practices for working on and ways of relating to ourselves as selves, what I will be demonstrating in the following chapters is how, when it comes to the practice, production and use of herbal medicine, the *disciplines* of sociology, anthropology, Vietnamese traditional medicine, Western herbal medicine, and neuropharmacology have also had plenty to say about how these selves are constituted (as 'whole persons', coping subjects or neurochemical selves (Rose 2003)), how they come to be pathologised and indeed how they can be recuperated and normalised.

Of particular interest to me will be the role of anthropology and sociology (especially their medical sub-disciplines) in the subjectification of modern herbal medicine users. As pointed out earlier, many sociologists have argued that the mid-20th century marked a turning point in the history of modernity, a time when Man could finally emancipate – by way of increased self-reflexivity, raised awareness or improved communicative competences – his/her colonised lifeworlds, alienated subjectivities or repressed creative drives. In contrast, rather than seeing in processes of modernisation and rationalisation the mechanisms of a kind of colonisation or suppression of individual and collective lifeworlds (cf. Habermas, Freud, Simmel, Weber and others), what I will be arguing is that one way to characterise the forms of relations between modern ways of knowing and being is in terms of not just a *normalisation* but also a *governmentalisation* of human subjectivities which actively bring these subjectivities into being, rendering them intelligible, and thereby amenable to intervention.

Never before have individual and collective cognitive frameworks and lifeworlds been mapped out with such intensity. It is a disciplining that has been made possible by branches of knowledge that have flourished since the early 20th century, including psychology, anthropology, ethnography and a whole range of ethno-sciences, the latter of which eventually 'came home from the tropics' resulting in a distinctive ethnographic turn in late 20th century sociology (Latour 1993). Moreover, it is precisely through this mapping out that pathologies of immaturity, unawareness, alienation, repression, disorientation and anxiety, which are considered particular to human subjectivities in both their individual and collective forms, have emerged and become accessible to normalising intervention. As we will see, if individuals or indeed populations are seen as having been held back in states of

'backwardness' by their traditions and superstitions, then it is through 'civilising' interventions that they can be 'righted' (in Canguilhem's sense of the word); if they are seen as having been alienated by processes of industrialisation, then it is through 'emancipating' or 'empowering' interventions that ossified lifeworlds can be recuperated; or if they are seen as having become disoriented and anxious in the face of the forces of globalisation, then it is through 'coping' interventions that these anxieties can be stabilised and grounded.

Hacking has argued that the classification of humans – for example, into primitive/ civilised, alienated/emancipated or disoriented/grounded (a speciality of anthropologists and sociologists in the past two centuries) – has looping effects: "there is a looping or feedback effect involving the introduction of classifications of people. New sorting and theorising induces changes in self-conception and in behaviour of the people classified. Those changes demand revisions of the classification and theories", and so on (1995: 370). Put in another way, we might say that different modes of knowing or styles of reasoning which emerge out of the human and social sciences can and do transmogrify into ways of being, as they provide individuals with certain ways of relating to, understanding and acting upon them selves as certain 'kinds' of people. Rabinow (2003) speaks of how *logoi* (reasoned or true discourses) can transform into different forms of *ethos* (relationships with your self) through practices of *phronesis* (practical wisdom) and *ascesis* (self-forming activity), underlining that when it comes to *anthropos* today this is an always-unfinished relation:

> The fact that there is a problem in thinking about human things [e.g. health], and that part of that problem lies in the inability to provide a stable solution, is coexistent and cotemporal with the practice itself… However, the form of the problem – and therefore the practices that produce it and that it produces – has not always been the same. (Rabinow 2003: 4)

Yet, as already mentioned, it is not only the human and social sciences that have contributed to the making up of the 'whole person' subjectivities which herbal medicine rely on. I will also show how the vitalistic theories of Sino-Vietnamese and British herbal medicine provide herbal medicine users with particular ways of relating to and understanding themselves, as do the serotonin and dopamine hypotheses of neuroscientists working on depression and addiction. While each of these ways of knowing is at one level in competition to establish an epistemological authority in matters of human illness and

health, as will become clear, they are not necessarily mutually exclusive, and indeed often co-circulate in the consultation rooms of herbal practitioners, public health programmes to promote the proper use of herbal medicine, or in self-help literature intended for self-treating herbal medicine users. And just as Canguilhem has shown how it is *concepts* that do the 'work' in making certain codes of observation or forms of medical intervention intelligible and practical, I will be showing how it is concepts (e.g. coping, balance, efficacy) that do the 'work' in the looping or transmogrification of ways of knowing into ways of being.

Dispositif

As discussed in the previous chapter, there is no shortage of sociological approaches and questions one can bring to the field of alternative and traditional medicine. I have suggested that one might highlight three predominant approaches to doing sociology in the field of TM and CAM – roughly divided into sociology of health and illness, sociology of professions and sociology of knowledge approaches – which is of course not to say that any particular studies or researchers are necessarily bound by these distinctions. But in grouping these three ways of doing the sociology of TM and CAM, I have tried to bring together some of the most important sociological findings from the past couple of decades in a field that is growing by the day, not least as pertains to Vietnam and the United Kingdom.

Clearly inspired by some of the first early-20th century medical anthropology studies of 'primitive medicine', we have seen how some sociologists have focused on highlighting symbolic effectiveness as a crucial part of TM and CAM treatments. What these rich ethnographic and narrative accounts of TMCAM practice and use have served to remind us is that however corporeal a disease, there is much more to healing than biology. These studies have meticulously mapped out both the centrality of cognitive frameworks in facilitating healing encounters, and the pragmatic and eclectic nature of users' health seeking strategies. That is to say, what we have learned from these studies is that not only are there bodies to be mended there are also subjectivities to be healed, a distinction solidified in ethnographic accounts of illness experiences, health-seeking behaviours, lay referral networks and coping strategies involving TMCAM. In a Vietnamese setting, Craig (2002) has carried out just such an ethnography of everyday health knowledge and practice, providing us with fascinating insight into how antibiotics and age-old family remedies

eclectically combine and transform in the daily health practices of a number of families in northern Vietnam. And in the United Kingdom, Cant and Sharma (1996; Sharma 1992) have carried out comprehensive qualitative research into both the reasons for use of CAM therapies by lay persons, including herbal medicine, and the challenges faced by its practitioners. What they found was considerable frustration with modern medicine on the part of lay persons who suffered especially from chronic conditions, but also a general pragmatic eclecticism as patients 'shopped around' and 'tried out' different forms of therapy.

We also saw how a number of researchers have adopted a sociology of professions take on relations between TM and CAM practitioners on the one hand, and state-sponsored biomedical monopolies on the other. These studies have historically demonstrated how divisions between orthodox and unorthodox, regular and irregular, or modern and traditional have shifted through the past centuries or indeed remained constantly fluid and blurred. They have also shown how contestations and power relationships at the fringes and margins of medicine have been a consistent feature of medical practice in recent centuries, not only in industrialised country settings but also in colonial and postcolonial contexts – where there is medicine, there is quackery. Saks' (1986) pioneering study into the introduction, dismissal, and eventual co-optation of acupuncture in the United Kingdom stands as a forceful account of how policies, regulations, as well as other authoritative practices, such as publishing in key medical journals, allowed the biomedical profession to fend off what it saw as incursions into its state-protected monopoly of professional medical practice. Moreover, O'Sullivan et al. (2005) have recently highlighted the debates surrounding ongoing efforts to professionalise herbal medicine in the UK through the establishment of accreditation systems, practitioner registers, and codes of conduct, which in turn are resulting in new sets of power relationships within herbal medicine. In Vietnam, Bodeker (World Bank 1993), working as a consultant for the World Bank, has carried out an analysis of the policies and regulatory frameworks that have allowed for the combination of traditional and modern medicine in postcolonial Vietnamese health delivery, especially highlighting resource inequalities and a particular development-aid-driven bias towards modern medicine.

And finally, I have also suggested that a growing number of researchers have chosen to approach the field of TM and CAM from a sociology of knowledge perspective. By

outlining the epistemological foundations of modern medicine, these studies have scrutinised the procedures and techniques of medical truth making, questioning their adequacy and legitimacy especially when dealing with epistemologically 'incommensurable' healing paradigms such as those of TM and CAM therapies. Unschuld (1985) and Kaptchuk (1983) have demonstrated to Western audiences the social context, rationality, and coherence of what for long were written off as the 'esoteric' and 'mystical' philosophies and traditions of traditional Chinese medicine (very much related, as we will be seeing, to Vietnamese medicine).[16] They have also shown how Chinese medicine has come to be scientificised in recent decades. In the case of what is nowadays known as 'western herbal medicine' in the United Kingdom, herbalists Mills (1993) and McIntyre (1988) have accounted for the concepts guiding their healing practices as well as their historical and geo-cultural origins, underlining the globalised nature of herbal medicine today. A recurring theme in these studies has been that of reductionism vs. holism and how to reconcile this split in clinical and laboratory settings. There is a grave risk, it is increasingly argued, that in the face of pressures to build up an evidence base, herbal medicine will be scientifically colonised, forced into translating essentially vitalist concepts of health and healing into the reductionist and mechanistic concepts of biomedicine. As a result, studies are increasingly exploring ways of reforming scientific research into TM and CAM such that it takes into account its holistic specificities and therapeutic goals.

What this current study shares with those mentioned above is a preoccupation with the much acclaimed revival and renaissance of herbal medicine in Vietnam/East Asia and the United Kingdom. However, it is not the cognitive lifeworlds that ethnographers emically map out, the regulatory frameworks that policy and risk analysts hold to account, the scientific (arte)facts that science and technology studies seek to situate, or the ideas that historians of ideas go about tracing to their origins and beginnings that are the object of my analysis. Instead, it is the interrelated grids of intelligibility and regimes of practices – the *dispositifs* – through which herbal medicine has come to be viewed as a problem, as well as through which solutions have come to be formulated and put into operation in recent decades. If I am at pains to distinguish the kind of history of the present that I will be carrying out in the following from ethnography, policy analysis, STS or histories of ideas, it

[16] See Craig (2002, especially Chapter 3) for a discussion on some of the key health concepts of Vietnamese traditional medicine.

is not so much to explain how these other approaches have got it all wrong, rather it is to highlight that what is at stake in this dissertation is an entirely different set of questions.

Should we understand the revival of traditional herbal medicine in the United Kingdom and Vietnam, as has been argued, in terms of its superiority in attending to a subject's inherent need for ontological security and existential coherence, as symptomatic of a general 'post-modern' rejection of a monopolised medical authority, or as simply safer and more efficacious in dealing with the chronic conditions that have emerged out of 'our modern way of living'? Perhaps. Yet if this is the case, then it becomes all the more tempting for a historian of the present to describe the formations of power-knowledge relations which have allowed Vietnamese and British herbal medicine to challenge biomedical monopolies since the latter half of the 20th century, to identify the techniques of truth making which either suggest or contest a superior efficacy for herbal medicine in the treatment of the modern scourges of, for example, depression and addiction, and to begin asking about the historical ontology of this so-called 'post-modern' subject who is in permanent need of cognitive coherence and existential reassurance.

As I pointed out in the opening chapter to this dissertation, there can be no question that TMCAM/biomedicine dichotomies persist to this day in most of the sociological research being carried out in this field. Whether cast in terms of objectifying-subjectifying, dominant-subjugated, reductionist-holistic or mechanist-vitalist divides, there seems to be an insistence on incommensurability even if, as mentioned, some of the more recent sociological work being done has begun questioning the rigidity of these dichotomies. What I suggest is to change tack by asking not what it is that makes therapies essentially different, but rather what it is that allows one to group this entire range of seemingly 'incommensurable' therapies, remedies and cures – from modern, traditional, alternative to complementary – as healing practices today. This is the conceptual move that will be unfolded in my analysis of the revival and renaissance of herbal medicine in Vietnam and the United Kingdom. In all the controversies, clashes and quarrels that have surrounded traditional and alternative medicine, it seems what is lost sight of is the fact that there nevertheless appears to be a common problem at stake – how best to promote individual and public health. This is <u>not</u> to say that everybody is after all proposing the same thing, rather it is to suggest, as Foucault has argued:

> To one single set of difficulties, several responses can be made. And most of the time different responses actually are proposed. But what must be understood is what makes them simultaneously possible: it is the point in which their simultaneity is rooted; it is the soil that can nourish them all in their diversity and sometimes in spite of their contradictions. (Foucault 1997a: 118)

It is from this perspective that I will be analysing practices and rationalities of regulation, validation, and use of herbal medicine in Vietnam and the United Kingdom. Herbal medicine, as we will learn, has been a problem to which countless solutions have been proposed through the past many centuries, solutions that have aimed at protecting the public from the dangers it might pose to their health, at ensuring its 'safe' and 'proper' use, or at improving its safety, quality and efficacy as a means to optimise its health benefits and minimise its liabilities. Each suggested solution has been intensely contested, with some eventually embraced only to be repealed and overruled at a later point. In other words, herbal medicine is a field in constant motion, ever adapting and rectifying according to new knowledge that comes to light about its efficacy, appalling scandals arising from its irresponsible production, or novel collaborations between herbalists and pharmacologists to standardise herbal preparations. Yet, if we were to bracket out say the last forty years or so of responses and solutions to the problem of herbal medicine, then it might be useful to ask what has made these various and differing solutions simultaneously possible, and whether or not they result from specific forms of problematisation.

Quackery, efficacy, life – accessing herbal *dispositifs* in Vietnam and Britain

How then should one go about accessing and describing herbal *dispositifs*, especially after having chosen to pursue a comparative analysis of two countries and two cases in such different social, economic, cultural, and historical contexts for the reasons outlined in the previous chapter? As always, research design calls for a number of strategic methodological choices which are to be informed by both an insistence on meticulousness and the dull limits of feasibility. My very first methodological choice has been to build up a robust document base upon which to perform the bulk of my analysis, which is perhaps somewhat in contrast to the ethnographic and narrative-based forms of analysis that have largely been favoured in sociological and anthropological studies of TMCAM. Nevertheless, I have not chosen to collate and sift through these documents in isolation. Instead, I have made every effort to visit and speak with the herbalists, pharmacologists, chemists, regulators and herbal medicine users who have produced this body of documents.

Not to carry out systematised or semi-structured interviews with them, but rather to talk and learn from them through conversations in their offices, practices, homes or laboratories. And so while it is primarily a rigorous document base that informs the following analysis, my reading and understanding of this base has been immensely facilitated by listening and speaking to those who have been instrumental in their preparation and dissemination.

My second strategic choice has been to narrow the scope of analysis to what I have found to be some of the most important controversies in both Vietnamese and British herbal medicine in recent decades. Controversies are often valuable entry points for an analysis, not because of the polemic and sensationalism that surround them, but rather because they often serve to sharpen the various truth claims that are invoked in the different ways in which herbal medicine is problematised. And in both Vietnam and the United Kingdom debates around quackery, efficacy and life have been central to the ways in which the transforming practice and use of herbal medicine in these two countries has been problematised, although as we will see, the particular ways in which they have been addressed have certainly been very different. Is it safe, does it work, what does it do? These questions have occupied regulators, herbalists, scientists, doctors, and herbal medicine users alike in both countries, and it is the problematisations and *dispositifs* that have emerged around attempts to answer them that I will be exploring.

Gathering documents and texts for this dissertation has taken me from Hanoi, Hoa Binh, Mai Chau and Siem Reap in Asia to London, Cambridge, Nottingham, Halle, Munich, Essen and Frankfurt in Europe. It has also taught me how to build up a robust and systematised library of documents (electronic and print) from Ministries of Health, Institutes of Bio-Chemistry, medical and scientific journals, international organisations, herbal practitioner associations, herbalists, patients, consumer organisations, and media. It has been an at times frustrating, mostly absorbing, and often detective-like effort to consolidate a solid empirical foundation from which to identify and discern rationalities and practices of herbal healing in two different countries. Along the way I have spoken at length with herbal practitioners and users, government officials, representatives of international organisations, chemists, pharmacologists, botanists, clinicians, doctors and fellow academics. And amidst all the confusion, excitement and jetlag, it is the three controversies over quackery, efficacy and life that have served as a kind of organising

schematic for the ways in which I went about collecting and organising empirical documentation for my research.

As a result, the material I have obtained can be broadly divided into three groupings:

Quackery: The first grouping concerns the regulation of herbal medicine in the United Kingdom and Vietnam. This includes government policies, legislation, memorandums and statutes of herbal practitioner associations, consultation papers, working papers, opinion pieces by practitioners and newspaper articles. What these documents have had in common is a stake on whether or not and, if so, how best to organise and regulate the practice and use of herbal medicine. In the United Kingdom, the House of Lords Select Committee on Science and Technology's report on 'Complementary and Alternative Medicine' from 2000 has been central, as have various documents from the National Institute of Medical Herbalists, the Herbal Medicine Regulatory Working Group, the Medicines and Healthcare Products Agency, Department of Health, the European Herbal Practitioners Association, and the Prince of Wales's Foundation for Integrated Health. It has been immensely helpful speaking to herbalists Nina Nissen and Ned Reiter about ongoing processes of professionalisation. For a historical contextualisation of these regulatory initiatives I have relied heavily on work by Griggs (1997), Saks et al. (1992) and Porter (1989).

In Vietnam, legislative proposals and regulations from the Ministry of Health, the Communist Party and the Association of Traditional Practitioners concerning the practice of traditional medicine have been key. While in Vietnam, I learned a great deal from speaking to traditional practitioners Tran Khuong Dan and Hoang Bao Chau, as well as to Director Trinh Van Lau of the National Institute of Drug Quality Control, Professor Tran Van Hien at the National Institute of Traditional Medicine, and Dr. Bui Thi Bang at the Institute of Materia Medica. For a historical contextualisation of recent initiatives to regulate traditional medicine I have relied on the work of Hoang et al. (1999), Huu (2003), Thompson (2004), Monnais-Rousselot (2002), and Guenel (2005).

Efficacy: The second grouping of empirical material can be further divided into two sub-groups. Firstly, those archival anthropological texts which have allowed me to explore how the evolutionary anthropology of the 19th century came to be challenged by a social and cultural anthropology in the 20th century have been crucial to my analysis of the 'efficacy'

of herbal medicine in Vietnam and the UK. Throughout the time I have spent researching Vietnamese and British herbal medicine I have consistently run into the contention that there is more to illness and healing than biology and physiology. As a part of unpacking this contention I decided to focus on those anthropological texts which have contributed to the building up of a theory of symbolic (as opposed to physiological) efficacy. To do this, I have tried to read Rivers, Ackerknecht, Evans-Pritchard, Levi-Strauss, Turner and others in the same way that Canguilhem read Broussais, Bernard, Comte and Bichat, to locate the concepts that have made a theory of symbolic efficacy tenable.

Secondly, I have also focused on toxicological, pharmacological and clinical efforts to validate the safety and efficacy of the two herbal remedies I have chosen to focus on, St. John's Wort and Heantos. This includes historical data on the uses of these medicinal plants, descriptions of them in the herbals and treatises of herbalists, scientific data on their phytochemistry, clinical efficacy trial protocols and results, as well as pharmacologic mechanism-of-action data. To facilitate this task, I have had the great fortune of spending many hours in the laboratories of the Institute of Chemistry in Hanoi, where Professor Tran Van Sung and his colleagues took great time to explain their work to me. In Germany, I had the opportunity to visit the Leibniz Institute of Plant Bio Chemistry, where Professor Ludger Wessjohann and Dr. Katrin Franke gave me a detailed overview of their work with Heantos. In Frankfurt, I visited the laboratory of Professor Walter Muller at the Biocenter of the University of Frankfurt, who provided me with an in depth background of his and his colleagues' work on the pharmacology of St. John's Wort. On the clinical side, I spent many a day at the Hoa Binh Treatment Centre for Drug Addiction, as well as Hanoi's Central Psychiatric Hospital in Vietnam. In Europe, I visited the Clinic for Psychiatry and Psychotherapy where a randomised controlled trial on Heantos is under preparation. I also benefited from a visit to speak with Dr. Klaus Linde in Munich at the Centre for Complementary Medicine Research who has worked with St. John's Wort.

Life: The final grouping of materials concerns the kind of life that herbal medicines are understood to promote, optimise and perpetuate. In particular I have chosen to focus on how herbal medicine has come to be seen as enhancing *both* the longevity and the quality of life of its users, including how it is described as providing them with a 'story' or a cognitive framework through which to come to terms with their conditions and their lives. As a result, this grouping of empirical material has included texts written by herbalists to

explain their healing practices, texts by public health officials, reports from Ministries of Health, medical anthropology/sociology monographs, as well as a good portion of self-help literature and consumer guides written for and by users of herbal medicine. While this part of the analysis has been largely documentary, for the sections in which I describe the vitalist theories of Vietnamese and British herbal medicine I have benefited greatly not just from the writings of herbalists, but also from speaking to traditional practitioners Hoang Bao Chau and Tran Khuong Dan in Vietnam and herbalists Ned Reiter and Nina Nissen in the UK.

Notwithstanding this firm empirical grounding, as already pointed out, I make no pretensions that what I describe in the following constitutes *the* history of herbal medicine in the two countries I have chosen; there is much more to herbal medicine in Vietnam and the United Kingdom than I will be covering in the coming chapters. Having said that, it is of course my obligation to demonstrate how those avenues of investigation and sites of empirical analysis that I have chosen to pursue are cardinal to the practice and use of British and Vietnamese herbal medicine today. Consequently, I would much rather consider this current work as a series of what Foucault (1991) has called 'game openings' highlighting a number of sites, tactics and strategies that have been involved in the mobilisation of herbal medicine in both countries. Each thematic I have chosen to focus on – quackery, efficacy, life – deserves a monograph in itself, in both countries. Nevertheless, taken as a whole, the game openings that my comparative analysis set out do tell us a great deal about what the optimisation of life requires today.

3 Transformations in quackery

It is surely the quack who stands as one of the most controversial, problematic, if not colourful figures of modern medical history. Whether peddling miracle tonics throughout the countryside, coaxing desperate patients into improvised backstreet surgeries or diatribing medical establishments for their theoretical and therapeutic fallacies, the 'quack' has been a consistent target of highly contested public health protection strategies in the past few centuries. Campaigns against the quacks, charlatans, mountebanks, cranks, and hucksters of medicine in Britain go back at least as far as the 16th century when the kingdom's first Parliament Act regulating the practice of medicine was passed in 1512, not least as a response to the "great multitude of… common artificers, smiths, weavers and women, [that] boldly and accustomably took upon them great cures, to the high displeasure of God, great infamy of the faculty and the grievous hurt, damage and destruction of many of the King's liege people" (cited in Griggs 1997: 56-57). In Vietnam, highlighting longstanding tensions between Northern (Chinese) and Southern (Vietnamese) medicine, the renowned late 19th century writer Nguyen Dinh Chieu called for the punishment of those 'quacks' who strayed from or distorted the medical teachings of Chinese medicine, including village healers who relied on family remedies, insufficiently trained acupuncturists, Southern medicine practitioners who combined Northern and Southern remedies, as well as Taoist priests and Buddhist monks who promoted superstitious healing practices (cited in Marr 1987: 174). Common to these controversies has been a suggestion to ban, exclude or limit the medical practice of those deemed to be damaging rather than improving the health of individuals as a measure of public health protection.

In the past two hundred years or so, public health protection strategies in both Vietnam and the United Kingdom have increasingly embraced dividing practices as a means of separating the competent from the incompetent, the genuine from the pretender, the regulars from the irregulars, or the doctors from the quacks. Needless to say, the history of such dividing practices reads as a succession of divisive attempts to agree upon and define boundaries of therapeutic competence. In the United Kingdom, the 1858 Medical Act is often highlighted as a landmark in recent medical history as it stipulated new educational requirements for those wishing to register themselves as medical practitioners with a General Council of Medical Education and Registration (later the General Medical

Council) chiefly because, "it is expedient that Persons requiring Medical Aid should be enabled to distinguish qualified from unqualified Practitioners" (Great Britain. Parliament. 1858). Its enactment is widely seen as having dealt a decisive blow to what had otherwise been a thriving therapeutic plurality at the time, where the university-educated physicians, apprentice-trained surgeons and licensed apothecaries of the urban centres were far outnumbered by the midwives, herbalists, folk healers, bone-setters and barber-surgeons who catered for the health needs of the, especially rural, majority (see Porter 1989; Saks 1992). In Vietnam, the opening of the Hanoi School of Medicine in 1902 to train local "auxiliary doctors" and the subsequent launching of an Indigenous Medical Assistance programme in 1905 by French colonial administrators were described as important civilising initiatives in the face of "a resistance to the penetration of western medical science… due to the ancestral habits of a population attached to its traditional medicine" (cited in Monnais 2006). These early 20th century events are seen as having been pivotal to the emergence of the kind of hierarchies of medical authority which persist to this day in Vietnam (see Monnais-Rousselot 2002; Thompson 2004).

In this chapter, I will show how the relatively recent births of traditional, alternative and complementary medicine are once again transforming the ways in which public health is to be protected from 'quackery' in Vietnam and the United Kingdom. Importantly, I will be arguing that the renaissance and revival of traditional and alternative medicine (including herbal medicine) in these two countries is not so much leading to a diminishing of dividing practices as to an *internalisation of dividing practices*. In particular, as various traditional, complementary or alternative forms of medicine have been integrated or mainstreamed into public health delivery, their practitioners are increasingly being called upon to help the public distinguish between the competent and the incompetent *within* a plurality of different forms of medicine. Consequently, just as Porter (1989) argued that the mid- to late-19th century professionalisation of medicine in Britain resulted in a 'quackery with a difference', I will argue that we are once again in the midst of such a transformation. And while there are important differences between the United Kingdom and Vietnam in the ways in which this transformation is unfolding, we will also see how there have been a number of convergences in the ways in which the protection of the public from dangerous practitioners has been organised.

What follows, then, is an analysis of how the problem of quackery – damaging rather than beneficial medical practice – is being posed and addressed today in these two countries, as well as of how distinctions between "safe" as opposed to "dangerous" medical practice are being made and what effects these dividing practices are having. It is important to underline the ideologically-drenched nature of the term 'quackery' itself. Indeed so negative are its overtones and so controversial are its historical associations with many of the therapies and treatments which today are considered traditional, alternative or complementary, that one would be hard-pressed to find it used in contemporary Vietnamese or British legislative proposals, practitioner association statutes or consumer awareness programmes. Yet, as we will see, each of its historical definitions – intentional deception for financial or other personal gain, over-selling or puffing (quacking) of abilities, dangerous belief (however well-intentioned) in esoteric ideas about healing, incompetent practice resulting from insufficient or outdated skills – remains crucial in ongoing efforts to regulate the practice of medicine in Vietnam and the United Kingdom. As a result, what I will demonstrate is how banning, excluding or limiting the medical practice of those deemed to be damaging rather than improving the public health remains just as salient today as it was in the 19th century as a strategy of public health protection. It is the way in which the problem has come to be posed that has changed.

In order to carry out such an analysis, I will be covering a wide range of legislation, policy documents, TMCAM practitioner association proposals, parliamentary committee investigations, as well as expert reports from international organisations in both countries. I will also point to similar initiatives in other countries of the world to highlight the global form that medical practice and regulation takes today. The point of this chapter is not to argue that the experiences of Vietnam and the United Kingdom have been homogenous, indeed we will see plenty of instances where this has categorically not been the case. Rather, what I will demonstrate is that whatever the particularities in forms and circumstances of medical regulation, one can certainly identify a common point of departure in contemporary efforts to regulate traditional, alternative and complementary medicine in these two countries – i.e. how best to safeguard and promote public health in a situation of 'medical pluralism'.

Quacks and quackery in the golden age of biomedicine

As a number of scholars have demonstrated, from the 19th century onwards nation after nation has pursued a strategy of what has been termed 'medical professionalisation' in the name of protecting their citizens from the life-threatening dangers that unqualified practitioners and untested medicines pose.[17] And, while there is of course plenty of polemic surrounding the extent to which today's established medical professions have in fact altruistically worked to protect and promote public health (and if so whether they have actually succeeded in doing so), what these 19th century efforts to organise medicine did initiate was an entire medical machinery (and industry) bent on distinguishing 'good' from 'bad' medicine and on separating those who can heal from those who cannot. Setting educational standards for practitioner qualifications; approving ethical codes for medical practice; creating and controlling registers of those who will be allowed to call themselves/ act as medical practitioners; reviewing any inconsistencies in the performance of registered practitioners with the possibility of excluding them; restricting what kinds of medicinal claims can be made; setting safety and efficacy standards for any medications that are to be licensed for sale; and issuing consumer guidelines for the appropriate use of medicines. All are instances of the kinds of dividing practices that have emerged around the modern regulation of medicine. Underlying such regulatory practices are assumptions about what kinds of expert knowledge and skills are requisite for those practicing 'good' or 'proper' medicine, what constitutes ethically responsible conduct on the part of practitioners, as well as what kinds of evidences are required to validate safety and efficacy claims. And for this very reason, it is this medical machinery that has had everything to do with the drawing up of boundaries between conventional, alternative and quack medicines as we know them today.

The new Academies, Associations, Colleges and Councils of Medicine that appeared throughout Europe and America during the 19th century, quickly spreading to the colonies, were legally presented as important parts of an urgent quest to sort the qualified from the unqualified in an otherwise dangerously liberal and lucrative market for nostrums, herbal remedies and treatments. According to a number of social historians of medicine, it was

[17] For individual accounts of the very different processes of national medical professionalisation in the 19th and 20th centuries see, for example: Australia (Willis 1983), America (Berlant 1975), Great Britain (Peterson 1978), Germany (McClelland 1991), The Netherlands (Schepers and Hermans 1999), France (Ramsey 1988), China (Hillier and Jewell 1983), India (Arnold 1993) and Vietnam (Hoàng, et al. 1999).

this enactment of legislation aiming to limit the practice of medicine to a certain defined group of practitioners coupled with the concurrent development of a laboratory-based form of scientific medicine that would mark the beginnings of a so-called 'golden age of biomedicine'. From this moment onwards, state-sanctioned biomedical monopolies ultimately separated biomedically competent practitioners from especially non-biomedical practitioners who were often charged with being dangerously unqualified (Cooter 1988; Inglis 1964; Johnston 2004; Saks 1995; Starr 1982; Wallis and Morley 1976; Willis 1983).

Interestingly, around the same time that such state-sanctioned medical professions were consolidating themselves, a number of medical movements ranging from homoeopathy, acupuncture, hydropathy, medical botany, osteopathy to mesmerism also began taking off throughout the United Kingdom, Europe and America (see Brown 1982; Cooter 1988; Darnton 1968; Porter 1989; Saks 1992). Common to the proponents of these movements, and what made them different from the hucksters and snake oil vendors, was a reasoned conviction that allopathic medicine, with its 'poisonous' drugs and 'mechanistic' view of the individual, had got it all wrong. As Porter (1989: 231) has put it:

> Each of these movements proclaimed itself to be in possession of a more subtle understanding of the true nature of disease as an integral part of the active processes of nature. Each offered a new plan of life based upon Nature's way and claimed to use more natural modes of healing – drawing upon herbs alone, or pure water, or (as with homoeopathy) infinitesimal quantities of the purest drugs.

Importantly, it was not scientific medicine as such that was being challenged by these medical movements, rather it was the 'flawed' conclusions of established medicine about the nature and cause of health and disease – homoeopathy, medical botany, osteopathy, mesmerism and hydropathy were not anti-science movements.

Darnton (1968), Wrobel (1987) and Cooter (1988) have all shown how the rallying of professional medical organisations around a particular form of scientific medicine based on germ and cell theory in the latter half of the 19th century was not as self-evident as one might think. With the validity, efficacy and safety of the violent purging techniques practiced by educated physicians very much in question by the mid 1800s, homeopathy's *similia similibus curentur* (law of similars), mesmerism's principle of animal magnetism, hydropathy's system of water cure, and herbalism's principle of stimulating the body's own

vis medicatrix naturae surely did not appear any more far-fetched or 'less scientific' than heroic medicine's theory of humours or Pasteur's germ theory. This is certainly suggested by the fact that many of these new medical movements were hailed in the popular media while also amassing considerable followings, not only among the general public but also among scientists and physicians. Indeed the patronage of esteemed members of society to both homoeopathy and herbalism has often been highlighted as an important factor in their survival (Griggs 1997; Saks 1992).

Nevertheless, after the initial successes of their fanfare-filled entries on to the medical scene, many of the leaders and practitioners of these medical movements were eventually pushed to the fringes and margins of medicine, often condemned as the new 'quacks' of a biomedical age (see Inglis 1964; Saks 1992; Wallis and Morley 1976). What followed was a good century of what has variously been called the 'dominance', 'hegemony' or 'monopoly' of biomedicine as witnessed in the ways in which medical practice was organised and regulated in the General Practices, hospitals, schools, laboratories and journals of medicine. The medical profession, it is argued, was so successful at defending the boundaries of its competencies that the period spanning the late 19th to mid-20th centuries is often referred to as the "dark ages" of such modes of therapy as homoeopathy, acupuncture and herbalism in the United Kingdom, with numbers of both users and practitioners falling into steady decline.[18] Numerous studies have shown how these (and other) 'fringe medicines' and their practitioners were systematically shunned and brought into disrepute by the medical journals of the day, kept off the curricula of medical schools, denied coverage by the emergent public and private health insurance schemes, and refused the privilege of becoming registered practitioners. As the argument goes, the medical profession was able to keep practitioners of 'marginal medicine' at bay by actively pursuing strategies of subordination, limitation or exclusion, while also ostracising the medical heretics amongst their own ranks who dared to stray from orthodoxy (see Brown 1985; Cooter 1988; Dew 2003; Inglis 1964; Saks 1995; Salmon 1984; Wallis and Morley 1976; Willis 1983; Wrobel 1987).

[18] For accounts of the "dying out" of herbalism , "declining empire" of homoeopathy and "marked decline" of acupuncture see Griggs (1997), Inglis (1964) and Saks (1995) respectively. It should, however, be pointed out that at no point in time did any of these therapies completely disappear.

While the term ‘quackery’ has its origins in the therapeutic plurality of early modern Britain where sellers of patent medicines were often accused of quacking or exaggerating the curative properties of their wares, in the ‘golden age of biomedicine’ contestations and controversies often took place in an epistemological field of competing theories and concepts of health and disease. This was a quackery with a difference, and it is with this understanding of it that we should explain the eventual denial of a Medical Herbalists Bill (which would have given them statutory recognition as a medical profession on par with biomedical doctors) by the British Ministry of Health in 1923 on the grounds that it is “doubtful whether a trained herbalist is any less dangerous than a trained one” (Chief Medical Officer cited in Larkin 1992: 117). In a similar vein, Saks (1986) has shown how the ‘esoteric’ theories of Chinese medicine were often highlighted in campaigns to dismiss acupuncture in the early part of the 20th century, and Larkin has shown how the theories of osteopaths came to be attacked in the British Medical Journal as “far-fetched and fanciful, and, when applied to grave diseases such as typhoid fever and diphtheria, as decidedly dangerous” (1992: 116). What made these controversies novel was, as Porter (1989: 232) has argued, that these various ‘fringe’ medical movements “chose to secede wholly from official medicine…, set[ting] themselves up in judgement upon the medical profession, rather as regular medicine had traditionally put quackery in the dock”.

In addendum to campaigns against miracle cure peddlers and their patent medicines which were initiated in the late 19th century, the medical profession in the United Kingdom turned its attention towards this new group of medical fringe activists who claimed to be intent on rectifying the erroneous theories and practices of the medical establishment while offering more ‘natural’ theories and methods of healing in lieu thereof. In effect, the battleground of good vs. bad medicine was broadened from a mainly commercial field of patent medicines and miracle cure products to include an epistemological field of competing theories about the underlying causes of illness and disease. In this sense ‘quackery’ came to denote the actions of not just hucksters and cranks, but now also a whole new breed of ‘pseudo-practitioners’, ranging from registered heretics and deviants to marginal, fringe or quasi-practitioners of non-biomedical therapies, who were considered dangerous not so much (or at least not only) because of the products they peddled but rather because of their heretic or unorthodox beliefs (Larkin 1992; Saks 2003; Wallis and Morley 1976; Wolpe 1994). Regarded as ineffectual at best and downright deleterious at worst by state-sanctioned professional medical associations, members of the public were to be shielded as best

possible from non-biomedical forms of therapy as a matter of protecting their health by way of active and often malicious efforts to discredit, subordinate, limit or exclude these practitioners and their therapies (see Griggs 1997; Saks 1986; 2003).[19]

"Weaning the natives from witchcraft"

The role of modern medicine as a 'civilising weapon' in colonial policy and practice is well documented, something hardly surprising considering the near perfect coinciding of the emergence of biomedicine with the colonial heydays of the late 19th and early 20th centuries. Whether in large-scale tropical hygiene programmes, targeted campaigns to stamp out 'witchcraft' or national vaccination initiatives, modern medicine was to play an important role in civilising colonial populations that were considered 'backward', 'primitive' or 'simple' (see Arnold 1993; Hillier and Jewell 1983; Last, et al. 1986; Stoler 1995). And even if the impact of modern medicine in terms of primary healthcare delivery has been limited to say the least, the dividing practices that constitute the modern regulation of medical practice have certainly not been unique to Europe and America. In Vietnam, as Monnais-Rousselot (2003) has shown, the efforts of colonial authorities to "medicalise" French Indochina took hold at the turn of the 20th century with the establishing of a Colonial Health Advisory Council and a Colonial Health Corps of colonial doctors that would set up hospitals and provide medical services under a motto of "Vaccinate, Register and Disinfect". Local or 'auxiliary' doctors were trained at the Hanoi School of Medicine to assist colonial doctors in implementing an Indigenous Medical Assistance programme aimed at preventing epidemic and endemic diseases, especially through hygiene education.

The effect of these and similar colonial health care programmes on the practice and use of what is commonly referred to today as Vietnamese traditional medicine was tangible. And although its practice and use was never even close to being abolished, scholars of traditional medicine in Vietnam do suggest that colonial healthcare policies were responsible for "ruthlessly dr[iving] traditional medicine into stagnation and decline" (Hoàng, et al. 1999: 25-6). This was not in the least because of a largely negative colonial view of Vietnamese traditional medicine as "quackery", made up of "secret remedies" and

[19] As Saks (1986) has shown, one would do well to empirically examine the various forms of justifications for these active efforts to discourage and limit the practice of unorthodox medicine. Although primarily framed in a rhetoric of "public health protection", they certainly did not circumvent commercial and professional self-interests on the part of biomedical practitioners.

"superstitious" practices. For example, Monnais-Rousselot quotes a colonial doctor's frustrations when attempting to treat typhoid patients:

> Their families… ply them with all sorts of remedies coming from the Chinese quackery; no attention is paid to the cleanliness of the patient. It is only after the failure of Chinese sorcery and witch doctoring that the family brings the patient to the hospital. (cited in Monnais-Rousselot 2003: 12-3)

Moreover, as a result of it being "ignored by the French-run medical college and scorned by [auxiliary] physicians trained in the European manner who blamed it for its imprecise and anti-scientific knowledge of anatomy and physiology", Hoàng et al. argue that Vietnamese traditional medicine experienced a decline in systematic training and as a result "the number of less than capable traditional physicians or quacks increased" (1999: 25). In short, "the colonial regime sought to strangle traditional medicine and bar it from public services" (Nguyen 1965: 26).

What emerges from colonial problematisations of Vietnamese traditional medicine is a general, though not overall (see Monnais-Rousselot 2003; Thompson 2004; Tran 2002), rejection of its public health value. In other words, in colonial Vietnam, traditional medicine was for the most part marginalised and discouraged by public health programmes which favoured modern pharmaceuticals, hospital services and hygiene education. The theories of healing underlying Vietnamese traditional medicine (closely related to those of traditional Chinese medicine) were dismissed as "unscientific", and even if some of the plants and substances used by Vietnamese herbal practitioners were picked up on by colonial health practitioners for their medicinal and financial value, the sale of "secret remedies" was certainly seen as a threat to public health, especially as these were rarely subject to quality controls and regulation (Monnais-Rousselot 2003).[20] Moreover, there is no question that colonial health authorities in Vietnam, as they did in many other parts of the world, viewed the Vietnamese population as largely incapable of looking after their own health, especially since they were seen as resorting to superstitions and witchcraft in their quest for healing assistance. And it was exactly this perceived backwardness of native

[20] Notwithstanding the generally negative climate facing Vietnamese traditional medicine during colonial times (often referred to as a "period of stagnation"), Thompson (2004) has shown how the roots of today's collaborative, rather than competitive, relationship between biomedically trained and traditional practitioners can be traced to the colonial period. Moreover, Guénel (2005) has demonstrated how more than 600 titles published in the 1930-1960 period (most before the end of colonial rule in 1954) are currently catalogued under the heading "Đông Y" (Oriental Medicine) at the National Library in Hanoi.

populations in the colonies that was highlighted to justify long-term efforts by medical missionaries, 'self-sacrificing jungle doctors'[21] and locally trained auxiliary doctors "to wean the natives from witchcraft" throughout especially Africa and Asia (Nicolson 1988: 79).[22]

The birth of TM and CAM

After many decades of such colonial attempts to eradicate, marginalise or limit the so-called 'sorcery' and 'superstitions' of 'backward' populations, the mid-20th century was to mark a turning point in the history of public health promotion in many so-called developing countries, including Vietnam. The gradual demise of colonial rule left many newly independent nations with massive public health challenges, especially as regards those rural populations that had had little or no benefit from colonial health programmes. It was at this time that what has come to be known as 'traditional medicine' or TM began its transformation from a colonial evil that was to be routed out in the name of public health and progress into a postcolonial resource to be actively recruited in the quest to safeguard and improve the health of individuals and populations.

Not surprisingly, it is in China that a symbolic moment of this transformation might be placed.[23] Following a lively debate within his own party as to whether or not the practice of traditional medicine should be wholly abolished, chairman Mao Zedong argued in a 1944 speech that:

> to rely solely on modern doctors is no solution. Of course modern doctors have advantages over doctors of the old type; but if they do not concern themselves with the suffering of the people, do not train doctors of the people, do not unite with the thousand and more doctors and veterinarians of the old type… then they will actually be helping the witchdoctors… There are two principles for the united front: the first is to unite and the second is to criticise, educate and transform. (cited in Hillier and Jewell 1983: 312-13)

[21] See Vaughan (1991, especially chapter 7) for an excellent discussion on popular representations of the 'jungle doctor' as a self-sacrificing hero who sets out into the wilderness on a mission to bring order into nature, inevitably clashing with an 'evil witchdoctor' and barely escaping the jaws of a man-eating lion along the way, and all in the altruistic service of the 'natives'.

[22] In this connection we should not forget that in campaigns to subordinate and limit the practice of fringe medicine in Europe, similar arguments have been made about the need to change the "backwards" healing ways of especially rural populations (see Ramsey 1988).

[23] See Taylor (2005) for an account of how traditional Chinese medicine became an important element of the national public health policies of the Chinese Communist Party.

Ten years later, on the 7th of May 1954, 10,000 French soldiers surrendered to Ho Chi Minh's Viet Minh fighters at Dien Bien Phu, thus putting an end to eight years of struggle for control of Northern Vietnam between the two. Nine years earlier, Ho Chi Minh had declared the Democratic Republic of Vietnam independent, ultimately igniting Vietnam's first war of independence against French soldiers. Following the departure of the last French soldiers in October 1954, Ho Chi Minh returned to Hanoi to set up a government of the Democratic Republic of Vietnam, and it was during these times of nation-building that President Ho Chi Minh was to deliver a famous 1955 speech in which he would echo the words of Chairman Mao:

> We must build our own medicine… Our ancestors had rich experience in the treatment of disease using local medications and those of the north [China]. To enlarge the sphere of action of medicine, it is necessary to study means of integrating traditional and modern medicine. (cited in Hoàng, et al. 1999: 26; Nguyen 1965: 27)

This, it turns out, would be Vietnam's moment of transformation, a moment where Vietnamese traditional medicine was no longer to be discouraged in the name of public health. In the ensuing years, a comprehensive network of institutions was established mandated with modernising, standardising and repopularising Vietnamese traditional medicine. The first of these was the National Institute of Traditional Medicine, which was opened under the Ministry of Health in 1957 to preserve the legacy of traditional medicine and to promote scientific research into its methods and remedies. In the same year, the first unified National Association of Traditional Practitioners was also formed by active groups of herbalists who had long been incensed by colonial attitudes to their trade (see Thompson 2004). A few years later, in 1961, the Institute of Materia Medica was opened with a mandate to scientifically research the chemical properties of the many medicinal plants that were being collected and to modernise traditional herb formulas (Vietnam. Institute of Materia Medica. 2004). And in the same year, a Department of Traditional Medicine was opened for the first time in the previously French-run Hanoi Medical College to signal "cooperation between the Traditional Medicine and modern medicine systems in the fields of disease prevention and treatment, pharmaceutical production, staff training and scientific research" (Vietnam. National Congress of the Workers' Party cited in Nguyen 1965: 27).

This mid-20th century recasting of traditional medicine into a public health resource in China and Vietnam would mark the beginnings of a trend that has since spread not only to

other ‘developing countries’ in Asia, Africa and Latin America, but also to industrialised countries in Europe, America and Australasia. For, as we saw in the opening chapter of this dissertation, it was around this time that after nearly a century of dominance, state-sanctioned biomedical professions found themselves increasingly under fire from both within and without by an emergent medical counter-culture. The familiar critiques of biomedicine by so-called ‘fringe practitioners’ claiming a more ‘natural’ approach to healing were joined by a growing wave of professional critiques of the iatrogenic effects of biomedicine, psychological critiques of the neglect of the ‘whole person’ in biomedical treatment, feminist critiques of the over-medicalization of female existence, environmentalist critiques of the toxicities of chemical medicine, as well as sociological critiques of biomedicine’s reductionist definitions of health and illness. By the late 1970s, questions were being asked in many industrialised countries as to how many people were actually seeking medical help outside authorised and established sources.

In 1981, the Commission on Alternative Systems of Medicine that Dutch State Secretary for Health and Environmental Protection Jo Hendriks had put together in 1977 famously concluded that “the consensus of public opinion is no longer behind the [biomedical] monopoly, and the law is broken a thousand times a day as sick and disabled people seek the help of people, who are not legally authorised to provide it” (The Netherlands. Ministry of Health. 1981: 1). Since then, we have seen somewhat of a barrage of national hearings, public inquiries and committee investigations into the growing use of CAM throughout the industrialised world. These include: Denmark’s State Procurement Agency’s “Committee investigating natural products and unauthorised healing therapies” which reported in 1983; the Swedish Minister of Health’s Alternative Medicine Committee formed in 1984; the Australian Parliament Social Development Committee’s “Inquiry into alternative medicine and the health food industry” reporting in 1986; the French Ministry of Social Affairs and Solidarity’s expert group to evaluate “Médecines différentes” formed in 1986; the United States Congressional Subcommittee on Departments of Labor, Health and Human Services, Education, and Related Agencies’ hearings on “Alternative medicine” in 1993; the Norwegian Ministry of Health and Social Affairs’ “Public Assessment of Alternative medicine” from 1998; the USA’s White House Commission on Complementary and Alternative Medicine reporting in 2002; and more recently, a Ministerial Advisory Committee’s reporting on “Complementary and Alternative Health Care in New Zealand” for the Minister of Health in 2004.

In the United Kingdom, the BMA had tried to shrug off "growing interest in complementary medicine" as nothing more than a "passing fashion", citing their duty to warn patients "that consultation with practitioners of some alternative therapies may be attended by the risk of great harm" (British Medical Association. Board of Science and Education. 1986: 1, 73-4). Not too surprisingly, however, instead of stifling debate, this report would end up as the catalyst for a series of debates, legislative proposals and regulatory initiatives that have paved the way for some kind of official sanctioning of a new age of medical pluralism in the UK. Since then, osteopaths and chiropractors have achieved statutory recognition through parliamentary Acts in 1993 and 1994 respectively, and more recently a similar route has been embarked on by acupuncturists and herbalists. The numerous and fragmented organisations representing practitioners of other therapies, such as homeopathy, aromatherapy and naturopathy, have also begun exploring ways of uniting as single occupations, with their own practitioner registers, educational standards and disciplinary procedures. As a provisional culmination of this move towards mainstreaming CAM in the United Kingdom, the House of Lords Select Committee on Science and Technology published their report on "Complementary and Alternative Medicine" in November 2000, making a range of recommendations which are currently under debate (Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000).

Promoting or protecting public health

How then should we understand this relatively recent mobilisation of traditional medicine in Vietnam and complementary and alternative medicine in the United Kingdom?[24] In Vietnam, concerted efforts to actively mobilise traditional medicine have been in place since 1955 with the clear objective of promoting public health and, as a result, there has been a particular emphasis on *integrating* traditional medicine into national health delivery systems. As already pointed out, a newly independent Vietnam was facing massive public health challenges when President Ho Chi Minh called for the combination of traditional and modern medicine. Upon being asked ten years later whether the government had hesitated

[24] I am indebted to Anna Dixon for pointing out and helping me sharpen the distinction between promoting and protecting public health in the regulation of TMCAM during the course of a number of discussions concerning the regulation of herbal medicine in 2004-05.

before resorting to traditional medicine as a means to address these challenges, Minister of Health Pham Ngoc Thach responded:

> There are about 16,000 people practising traditional medicine. Shall we 'outlaw' them, or shall we pay the greatest respect to this ancient science of which they keep the secrets, and integrate them into our medical machinery? We have followed the second path. Together with physicians trained in modern methods those 'quacks' are now studying the scientific application of traditional medications to numerous diseases. While they become acquainted with the fundamental notions of modern medicine, our physicians learn the principles and important methods of treatment used in traditional medicine. Thus, we gain a substantial increase of both personnel and prescriptions, and an important new orientation in our scientific research. (Pham 1965: 12-3)

Nevertheless, this enlisting of traditional practitioners was not without its hurdles following a prolonged period of colonial medicalisation. Whereas doctors of modern medicine had been trained in state-run schools such as the Hanoi Medical School, practitioners of traditional medicine were "self-taught and family-trained, hence their medical qualifications varied greatly" (Nguyen 1965: 26). Conversely, western-trained 'auxiliary' physicians who had been more or less instructed to deride traditional medicine would have to be reacquainted with the traditions and treatments of their ancestors. To address these impediments to integration, the Vietnamese government set about expanding its network of institutions, associations, schools and departments of traditional medicine such that by now there are around 40 national or provincial traditional medicine hospitals,[25] over 50 Departments of Traditional Medicine in various provincial hospitals, and all seven of Vietnam's medical colleges have a Department of Traditional Medicine. Moreover the National Association of Traditional Practitioners has expanded into a network of associations at the provincial and district levels,[26] with membership estimates ranging from 20,000 to 34,000, which in turn is estimated to represent some 50-60% of all traditional medicine practitioners in Vietnam (Huu and Borton 2003; World Bank 1993).[27]

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[25] The National Institute of Traditional Medicine today goes by the name of the National Hospital of Traditional Medicine.

[26] With an estimated population of over 80 million, Vietnam is today administratively divided into 61 provinces, 500 districts and approximately 8,850 communes.

[27] This means that there are anywhere between 30,000 - 70,000 traditional medicine practitioners in Vietnam which is comparable to the country's corps of ca. 40,000 trained medical doctors (of which 7,800 have specialised in traditional medicine) (cf. United Nations Development Programme 2004; Vietnam Economy 2003a). Interestingly, that would bring the total number of modern and traditional practitioners to around 90,000, which is similar to the UK's total of 98,000 biomedical practitioners and ca. 4,000 herbalists and acupuncturists. The populations of Vietnam and the UK are comparable at 80 and 60 million respectively.

State-sanctioned traditional medicine in Vietnam today comprises two components, a Sino-Vietnamese theory and system of healing referred to as northern medicine (*thuốc bắc*) which includes herbal medicine, acupuncture, massage and exercise techniques, and a plant remedy-based form of medicine referred to as southern medicine (*thuốc nam*). And while Chinese influence is clear, the two Vietnamese scholars Tue Tinh (14th century) and Lãn Ông (18th century) are considered the fathers of a form of traditional medicine that was specifically adapted "to the physical and physiological characteristics of the Vietnamese person as well as to the particularities of Vietnamese pathology, which depends on the tropical climate of Vietnam" (Hoàng, et al. 1999: 13). In a recent book on Vietnamese Traditional Medicine, Bùi has argued that half-a-century into Vietnam's programme of integration, traditional medicine practitioners can today be classed into three different groups: firstly, a 'dying breed' of elder practitioners who have been trained in classical traditional medical techniques with a classical theoretical and philosophical base (*thuốc bắc*);[28] secondly, those who have received training at the traditional medicine faculties of medical colleges or secondary schools of traditional medicine; and finally, 'herb doctors' who have received no formal training but have acquired knowledge and experience through apprenticeships (*thuốc nam*) (Bùi 1999: 34-36). There are also an estimated 10,000 traditional 'healers' in Vietnam who can be divided into fortune tellers (*thay boi*), bonzes (*thay phap*), and 'witchdoctors' (*thay phu tuy*) (Nguyen 2003: 28), but tellingly these kinds of practitioners are invariably excluded from national programmes to integrate Vietnamese traditional medicine into national health delivery on grounds of 'backwardness'.

Although we will be seeing later how efforts aimed at protecting the public from insufficiently trained practitioners have taken on increasing importance in recent years, it is clear that the aim of the first efforts to integrate traditional medicine not only into the national health delivery system but also into national medical education and research programmes has been to promote public health by building "a medical service that is suitable to our needs" (Nguyen 1965: 27).[29] And while it might well be questioned whether

[28] Bui suggests that "nowadays, for reasons of advanced age, few practitioners want to participate in the area of classical medicine, but are dedicated to teaching and treatment in well-organised centres where they are able to transfer their valuable experience to younger generations of physicians" (1999: 34).

[29] It is in this connection that Vietnam's postcolonial history of isolation, trade embargos and conflict is especially relevant. For not only was the drive to integrate traditional medicine rooted in a conviction in its

initial objectives to fully integrate traditional medicine "with all practitioners of a hospital trying to learn traditional medicine and apply it" (ibid.) have been achieved, Vietnam today stands as one of the few countries in the world (together with China and Korea) that is credited with having an "integrated approach" to healthcare, where traditional medicine plays a substantial role in medical education, research and practice (WHO 2002b: 9).

In contrast, the past twenty years worth of efforts to unify, regulate and thereby mobilise some of the many forms of therapy that have come to be classed as CAM in the United Kingdom have been primarily justified in terms of a concern for public health protection – "the widespread and increasing use of CAM… raises significant issues of public health policy such as whether good structures of regulation to protect the public are in place" (Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000: I). As a result, rather than work towards an integration of CAM into national health delivery, authorities have focused their efforts on a kind of contained (self-)regulation of CAM practice. And while the officially-endorsed moves towards statutory and voluntary self-regulation (starting in the early 1990s) underscore the fact that far from all non-biomedical practitioners are considered a public health hazard today (as they were to a much larger extent in the past), it is also clear that one of the primary, explicitly stated goals of (self-)regulation is to "ensure that the public are protected from incompetent and dangerous practitioners… whose continuing practice presents an unacceptable risk" (Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000: 5.1, 6.1). In somewhat of a change in tactics, the BMA had already conceded in a 1993 report on new approaches to good practice in CAM that "it is not the place of the medical profession to proscribe the legitimate activities of consumers in health care" (British Medical Association 1993: 2). That did not, however, mean that growing use of CAM could be ignored as "doctors [do] have a duty to… safeguard the public health and, to this end, it is important that patients are protected against unskilled or unscrupulous practitioners of health care" (ibid.).

The novelty in this change of heart is of course not the suggestion that there are dangerous, incompetent, unskilled and unscrupulous CAM practitioners who pose a threat to the public, but rather it is the acceptance that there is in fact such a thing as a competent,

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utility and efficacy, it was in many ways also a question of economic necessity and feasibility (see Wahlberg 2006).

skilled and responsible CAM practitioner.[30] As a result, and echoing the preamble to the 1858 Medical Act, the House of Lords Select Committee argued that "the effective regulation of [CAM]… allows the public to understand where to look in order to get safe treatment from well-trained practitioners" (Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000: 5.1), a regulatory function that until very recently had been pretty much reserved for the biomedical profession in the United Kingdom. And so it is precisely here that we can see the outline of a transformed public health protection rationality: rather than directly advise against using 'fringe medicines' or discourage their practitioners from practicing, public health protection today entails helping the public to know where to look on the one hand and ensuring that CAM practitioners are well-trained and qualified on the other.

This very much developing public health protection strategy of consumer enlightenment has to date employed two specific routes, firstly a comprehensive mapping out of just what kinds of different therapies are on offer to CAM consumers, and secondly, a taxonomising and ranking of these therapies according to criteria of public health value/danger. Probably the most famous of such hierarchisations can be found in the Select Committee report from 2000, but more recently a consumer guide from the Prince of Wales's Foundation for Integrated Medicine has also grouped CAM therapies under headings of 'statutorily regulated', 'proposals made for statutory regulation' and 'other' (see Table 1).[31] It is important to understand what the key principle of taxonomy has been in each case.

According to the House of Lords Select Committee, an important means of helping the public know where to look is first of all to rank CAM therapies according to their 'scientifically established' evidence base.[32] The Select Committee's ranking of therapies into three separate groups was undoubtedly the most contentious element of their report, sparking wide debate as to what criteria were appropriate for such an exercise. For the

[30] Recall the Chief Medical Officer's argument from 1923 referred to earlier that it is "doubtful whether a trained herbalist is any less dangerous than a trained one".
[31] As an interesting aside, *The Times* recently provided their readers with a guide to alternative medicine in which they rated various CAM therapies according to "research evidence" and "research quantity". Western Herbal Medicine and acupuncture came out with a top ranking of 4 stars, Chinese Herbal Medicine was given 3 stars, chiropractic and osteopathy 2 stars, while homeopathy, aromatherapy and reflexology were given only 1 star. Bi-aura therapy, radionics, holographic repatterning and watsu were rated as "well, just don't go there" (Ahuja 2006).
[32] The Select Committee did also use degrees of self-organisation as a further criterion in their taxonomy, but it is clear that a 'credible evidence base' was their primary criterion.

Committee, the first group of 'principal disciplines' (or the Big 5) were distinguished by "scientifically established efficacy in the treatment of a limited number of ailments". The second group consisted of 'complementary therapies' which "give help and comfort to many patients when used in a complementary sense to support conventional medical care even though most of them lack a firm scientific basis". And finally, the last group of 'alternative disciplines' were described as "indifferent to the scientific principles of conventional medicine" and "lack[ing] a credible evidence base". While consumers are not explicitly advised against using Group 3 therapies, the Select Committee does argue that these therapies "cannot be supported unless and until convincing research evidence of efficacy based upon the results of well designed trials can be produced" (Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000: 2.1-2.11).

Table 1: CAM hierarchies

House of Lords Select Committee	**PW Foundation for Integrated Health**
Group 1: Principal disciplines Acupuncture, Chiropractic, Herbal medicine, Homeopathy, Osteopathy	**Statutorily regulated** Chiropractic, Osteopathy
Group 2: Complementary Therapies Alexander Technique, Aromatherapy, Bach remedies, Body work therapies (including massage), Counselling stress therapy, Hypnotherapy, Meditation, Reflexology, Shiatsu, Healing, Maharishi Ayurvedic Medicine, Nutritional medicine, Yoga	**Proposals made for statutory regulation** Acupuncture, Herbal medicine
Group 3: Alternative Disciplines *3a Long-established and traditional systems of healthcare:* Anthroposophy, Ayurvedic Medicine, Chinese Herbal Medicine, Eastern Medicine, Naturopathy, Traditional Chinese medicine *3b Other alternative disciplines:* Crystal therapy, Dowsing, Iridology, Kinesiology, Radionics	**Other therapies** Aromatherapy, Craniosacral therapy, Healing, Homeopathy, Hypnotherapy, Massage therapy, Naturopathy, Nutritional therapy, Reflexology, Reiki, Shiatsu, Yoga therapy

(Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000; Prince of Wales's Foundation for Integrated Health 2005)

On the other hand, the main principle of taxonomy used by the Prince of Wales's Foundation for Integrated Medicine in their threefold grouping of the "most widely used" therapies was not so much a therapy's evidence base, but rather the extent to which they protect consumers from "untrained or insufficiently trained" practitioners (Prince of Wales's Foundation for Integrated Health 2005: 7). For the Foundation, regulation is the key to ensuring safe and responsible practice and while "osteopaths and chiropractors are

regulated by law, like doctors and nurses... the other complementary healthcare professions are at different stages of developing voluntary systems of regulation" (Prince of Wales's Foundation for Integrated Health 2005: 13). In other words, the three groupings of therapies used in their report indicate the respective "stages" of their systems of regulation. The aim of the Foundation's guide is to help consumers "find a properly trained and qualified practitioner of that therapy" and in the absence of effective regulatory systems (e.g. for therapies classed as 'Other') to suggest "questions to ask a practitioner before going for treatment" (Prince of Wales's Foundation for Integrated Health 2005: 7, 16).

The point to be made about the Select Committee's and Foundation's respective hierarchisations of CAM therapies is that they demonstrate how dividing practices are in the first instance being internalised into a differentiated CAM field in general. It is evident that the blocs often associated with the 'golden age of biomedicine' (i.e. a biomedical 'us' vs. a non-biomedical 'them') are in the process of being nuanced to reflect medical pluralism in the UK today. And as I have suggested, this nuancing has been made possible in the first instance by mapping out and taxonomising the different forms of therapy on offer to consumers as a means to helping them know where to look. Consumer vigilance[33] is encouraged all the more if a therapy's regulatory mechanisms are seen as fragmented or, as argued by the Select Committee, if a 'credible evidence base' is lacking.

On the appropriate, safe and responsible practice and use of TM and CAM

At the twenty-second World Health Assembly of the WHO, held in Boston in July 1969, a resolution was passed expressing "concern… about the hazards and economic wastage connected with the empirical use of [traditional medicines] as long as their efficacy and safety have not been established" (WHO 1969). The resolution did go on, however, to request that the Director-General of the WHO study and report back on this "widespread use of various traditional medicines", leading to the formation of a Working Group on Traditional Medicine which in turn would eventually become the Traditional Medicine Programme of the WHO. Not least as a result of the efforts of this working group in the 1970s, the "concern" that had been expressed by the World Health Assembly in 1969 had

[33] For example, the Foundation for Integrated Health gives this caution to potential CAM users: "A friend of yours may tell you that her arthritis got better after she was treated with a particular complementary therapy. This is interesting and good news for your friend, but you should really have more information before you make a decision about which complementary therapy to use" (Prince of Wales's Foundation for Integrated Health 2005: 9).

by 1977 turned into "recogni[tion] that traditional systems of medicine in developing countries have a heritage of community acceptance, and have played and continue to play an important part in providing health care" (WHO 1977). This, some might argue, reluctant shift in WHO strategy was finally cemented at a meeting held in Geneva from 28 November to 2 December 1977[34] on "the promotion and development of traditional medicine" (WHO 1978). The challenge addressed at this meeting was no longer how to discourage traditional medicine and its practitioners, but rather how to ensure that traditional medicine and its practitioners contributed to rather than hindered national public health objectives.[35] Two decades later, in 2001, following countless consultations and studies in member states, an answer to this new question was forthcoming:

> Recognizing the widespread use of traditional and complementary/ alternative medicine and the tremendous expansion of international markets for herbal products, it is all the more important to ensure that the health care provided by traditional and complementary/ alternative medicine is safe and reliable; that standards for the safety, efficacy, and quality control of herbal *products* and traditional and complementary/alternative therapies are established and upheld; that *practitioners* have the qualifications they profess; and that the claims made for products and practices are valid. These issues have become important concerns for both health authorities and the *public*. National policies are a key part of addressing these concerns. (WHO 2001: 4, my emphasis)

Within this short summary of what have been identified as the key obstacles to the further mobilisation of TM and CAM in public health delivery lies the sketch of a new public health rationality. Gone is the provocative colonial language of 'quackery', 'backwardness', 'sorcery' or 'witchcraft', only to be replaced by a new normativity of 'responsible practice', 'appropriate use' and 'safe and effective therapies'. And by extension it is in the irresponsible practice, inappropriate use as well as unsafe and ineffective therapies that I argue we can once again identify a quackery with a difference today. What I mean by this is that the kind of dividing practices that in the past were often mobilised to separate a biomedical 'us' from a shady non-biomedical 'them' have been

[34] The same year, incidentally, that the Dutch Commission on Alternative Systems of Medicine was formed as one of the first in Europe.

[35] It is telling to note that while the role of traditional medicine in providing healthcare to the populations of 'developing countries' was recognized in the aforementioned 1977 World Health Assembly resolution on the "Promotion and development of training and research in traditional medicine" (WHO 1977), it was at the same time emphasised that "primary health care in developing countries has not reached the bulk of populations", suggesting that even if the majority of people (60-80% by their own estimates) were relying on an unregulated and unsupervised traditional medicine sector for their health needs, this did not constitute "primary health care".

internalised into a multiplicity of different therapies and treatments. Just as qualified biomedical practitioners have long been distinguished from unqualified persons, today TM and CAM practitioners are being mobilised to distinguish the qualified from the unqualified and the competent from the incompetent within their own individual forms of therapy. In the following chapter, I will address the ways in which the products, practitioners and patients of British and Vietnamese herbal medicine have each become objects of public health problematisation in recent decades. For now, I will focus on how the irresponsible, incompetent or dangerous practice of TM and CAM in general has come to be problematised and tackled through targeted public health interventions in the two countries under scrutiny here.

It is possible to identify two general priorities in ongoing efforts to ensure the safe and responsible practice of TM and CAM in both Vietnam and the United Kingdom. The first has been a concerted effort to encourage the unification and organisation of practitioners of particular therapies into accountable, transparent and representative Associations. In the UK, where homeopaths and herbalists, for example, have a long history of self-organisation dating back to the 19th century, underscoring their premise that good CAM regulation helps the public know where to look, the House of Lords Select Committee argued that "the public cannot have full confidence in those therapies where there is considerable professional fragmentation" and consequently recommended that "in order to protect the public, professions with more than one regulatory body make a concerted effort to bring their various bodies together and to develop a clear professional structure" (Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000: 5.12).

It is without doubt the case that both historically and contemporarily, many forms of CAM in the UK have been characterised by such fragmentation, with a wide array of organisations representing not just different CAM therapies, but also different groups of practitioners within each individual therapy.[36] Osteopaths and chiropractors were the first to be given statutory recognition through Parliamentary Acts, in 1993 and 1994 respectively, in return for a commitment to self-regulate their own practitioners by establishing a unified register of qualified practitioners as well as ensuring strict education and curriculum criteria. Herbal medicine and acupuncture are currently next in line for

[36] See chapter 4 for a discussion of such fragmentation as regards herbal medicine.

statutory recognition since, as argued in the Select Committee report, the practice of "both acupuncture and herbal medicine do carry inherent risk, beyond the extrinsic risk that all CAMs pose, which is the risk of omission of conventional medical treatment" (Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000: 5.54). Practitioners of other therapies have also been encouraged to join forces under single umbrella organisations, although at this stage not with an imminent prospect of statutory recognition.

In Vietnam, practitioners of traditional medicine have also had a long history of organisation dating back to at least the 15th century Royal Court of Medicine of the Ho dynasty (Nguyen 1965: 23). In more recent times, as already pointed out, the National Association of Traditional Practitioners has mushroomed into numerous provincial and district level chapters throughout the country. From its beginnings, the national strategy to combine traditional and modern medicine has worked "to integrate [these associations] progressively into the socialist medical organisation" (ibid.: 30). It is these associations, as we will see later, that have become pivotal in a recent push to mobilise apprentice-trained, rather than university-educated, traditional practitioners by developing a licensing system at the district level.

The second, and in many ways most important, priority in efforts to ensure the safe and responsible practice of TM and CAM has been to specifically target the qualifications and competencies of its practitioners. Indeed, if there is one feature one were asked to highlight from the ongoing transformations in quackery that I am accounting for in this chapter, it would have to be the mapping out of practitioner *subjectivities* as a concrete sight of public health intervention. For if the public is to be safeguarded and their health promoted, then it is clear that the public must be protected from what in recent TM and CAM regulatory initiatives have variously been called the "incompetent and dangerous practitioners", the "unskilled or unscrupulous practitioners" and the "unqualified individuals" of these therapies (British Medical Association 1993; European Parliament. Committee on the Environment 1997; Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000). To tackle this pressing objective, which it must be stressed has in no way been unique to TM and CAM but rather has with equal urgency obligated

biomedical practitioners,[37] a number of practical initiatives have been launched as a means to install what the UK's Herbal Medicine Regulatory Working Group has called "procedures to protect patients and the public from individuals it deems unfit to practise" (Great Britain. Department of Health. European Herbal Practitioners Association. Prince of Wales's Foundation for Integrated Health. 2003: 19).[38]

Based on its own experiences, the British Medical Association has argued that five important areas should be covered by these procedures:

> To provide a code of conduct, a disciplinary procedure, and a complaints procedure; to provide minimum standards of training and to supervise training courses and accreditation; to understand and advertise areas of competence, including limits of competence within each therapy; to keep an up to date register of qualified practitioners; and to provide and publicise information on CAM. (cited in Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000: 5.14)

And as Clarke et al. (2004) have suggested, one might well conceptualise such a task in terms of a Foucauldian understanding of ethics, since such procedures propose very specific modes of relating to oneself which, in turn, make available a whole range of technologies and techniques of the self to carry out desirable forms of *ascesis* on oneself. In other words, a relationship with oneself that incites a kind of permanent self-scrutiny and self-fashioning, in this case fashioning into a 'competent' and 'responsible' TM or CAM practitioner, not only by securing minimum competency and thereby registration as a qualified practitioner, but also by an ongoing engagement with what is increasingly referred to as 'continuing professional development'.[39] As argued by the WHO, it is about "improving their skills in… prescribing and utilizing medicines in safe and consistent ways" as well as "[e]xpanding the knowledge and skills of traditional health practitioners

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[37] While it is outside the scope of this dissertation to dwell on this point, it is more than relevant to highlight that the biomedical profession has itself since the mid-20th century seen a considerable rise in cases of "(un)fitness to practice" as well as of "serious professional misconduct" (see Bradby, et al. 1995; Stacey and General Medical Council 1992). Also in Vietnam, the Communist Party has recently argued that "the seamy side of a market economy involves the risk of fading away the noble ethics of the physician" (Vietnam. Communist Party of Vietnam. 2005).

[38] It is interesting to learn that just as biomedicine has had its 'deviant insiders' and 'heretics', the establishment of educational requirements and disciplinary procedures is increasingly allowing for the emergence of 'alternative heretics' and 'deviants', i.e. those alternative practitioners who do not fully concur with or practice according to the standards and criteria of an established occupational/professional organisation (see Clarke, et al. 2004; Welsh, et al. 2004).

[39] See Clarke et al. (2004, especially pp. 336-7) for an empirical discussion that situates Foucault's notion of 'techniques of the self' in the contrasting experiences of an association of Chinese herbalists and an association of chiropractors in their quest for statutory self-regulation in the United Kingdom.

so they can assume more responsible roles in primary health care programmes" (WHO 1995: 47, 9).

For TM and CAM practitioners, these professional procedures and the techniques of the self they demand of their members become a kind of (self-)policing mechanism, as they stipulate the minimum qualifications, kinds of conduct, professional training requirements and annual fees that are demanded of them and fellow practitioners if they are to be authorised as registered practitioners of their particular healing profession. In return, they are given access to various kinds of support in their continuing professional development, the right to use a certain protected titles such as 'herbalist', 'traditional medicine physician', 'acupuncturist' or 'chiropractor', as well as guidelines on how to act in challenging clinical situations (e.g. when to refer a patient to a biomedical doctor). But it is also these self-policing mechanisms that have proven contentious in both Vietnam and the United Kingdom as they inevitably generate grounds for an entire range of exclusionary practices. At risk of exclusion in the UK are all those practitioners who, for whatever reasons, either cannot live up to the requirements of their Associations or, once registered, breach codes of conduct. The prospects for this outsider group are that while they will share a common lack of access to a protected title and register, their reasons for being excluded can be as varied as not being able to afford Association membership dues and post-registration exclusion because of "unacceptable professional conduct" (Great Britain. Department of Health. European Herbal Practitioners Association. Prince of Wales's Foundation for Integrated Health. 2003: 121).

In Vietnam, the Association of Traditional Practitioners has yet to introduce any kind of formalised minimum requirements for membership nor has it agreed upon a binding code of conduct. Nevertheless, as we will be seeing in the following chapter, ever since the early 1990s when Vietnam's fourth constitution made it "strictly forbidden for private organisations and individuals to dispense medical treatment, or to produce and trade in medicaments illegally, thereby damaging the people's health" (Vietnam. 1992: Article 39), a licensing system for private practitioners of traditional medicine has been developed in cooperation with local chapters of the Association of Traditional Practitioners. Moreover, the Ministry of Health has also introduced an "Ordinance on the Practice of Private Medicine and Pharmacy" in October 1993, and more recently "Circular No.13/1999/TT-BYT guiding the implementation of the ordinance on the practice of private medicine and

pharmacy, regarding the traditional medicine and pharmacy" in July 1999. According to these new regulations "those who wish to be granted the certificates of general or specialised traditional medicine physician or of traditional medicine pharmacist… shall have to pass an examination organised by the Ministry of Health" (Vietnam. Ministry of Health. 1999a).

What members of the public as well as health authorities get from such procedures of (self-)policing is what might be thought of as a whole range of *practices of assurance* from the TM and CAM practitioners they consult or sanction. They are assurances of accountability, competency and ethical conduct, with all the debates over just what constitutes 'safety', 'quality' and 'efficacy' that have unavoidably followed. Debates we will be returning to time and again in the following chapters. As summarised in a recent British consumer guide on CAM, these practices of assurance serve to provide the public with clear information on "how to find a properly qualified and competent complementary practitioner [and] what to do if you are unhappy with treatment" (Prince of Wales's Foundation for Integrated Health 2005: 7). In Vietnam, where the government has been actively integrating traditional medicine into national health delivery for many decades now, such practices of assurance have especially focused on educating *both* traditional and modern practitioners about each others' theories and practices of healing. In more recent years, however, there has been a specific push to upgrade the qualifications of apprentice-trained herbal practitioners with the help of local Associations of Traditional Practitioners and the above-mentioned licensing system (see chapter 4). As has been argued by Vietnam's Communist Party, in Vietnam, regardless of whether specialised in traditional or modern healing practices, "each and every health official and worker must always uphold medical ethics and improve his/her professional capacity to deserve the trust and praise of society" (Vietnam. Communist Party of Vietnam. 2005: 1.5).

Conclusion: a quackery with a difference

Whether it is with the prime objective of promoting or protecting public health, the mobilisation of TM and CAM in both Vietnam and the United Kingdom continues to gather pace today. This, I have argued, is markedly at odds with early 20th century strategies of marginalisation, subordination and exclusion, which ironically enough were also justified as concrete means to protect and promote the public health. It is the form of the problem that has changed. In no way unique to the two countries in question here, this

change in tactics has perhaps most succinctly been summarised by the White House Commission on Complementary and Alternative Medicine, who in 2002 argued that:

> the question is not, 'Should [people] be using complementary and alternative medicine modalities?' as many – perhaps most – already are doing so… Until recently, the primary response of Federal, state, and local health care regulatory agencies to this phenomenon was to restrict access to and delivery of Complementary and Alternative Medicine services to protect the public from unproven and potentially dangerous treatments. Since the early 1990s, however, scientific evidence has begun to emerge suggesting that some CAM approaches and products, *when used appropriately*, can be beneficial for treating illness and promoting health. (United States. White House Commission on Complementary and Alternative Medicine 2002, my emphasis)

To this summary we can now also add 'when practiced responsibly'. The shift is conspicuous. Rather than marginalise, exclude or restrict access to practitioners of traditional and alternative medicines (as happened in both Vietnam and the United Kingdom in the early 20th century), the aim of contemporary efforts to regulate TM and CAM has been recast into what might be termed a normalisation of its practice and use. And in the process, it seems that we are once again witnessing the emergence of a quackery with a difference. Whereas in the 18th and 19th centuries a large part of the battles against quackery were fought out in a commercial field of miracle cures and patent medicines and in the late 19th and early 20th centuries this battleground expanded into an epistemological field of competing theories of health and illness, in both Vietnam and the United Kingdom today the battlefield it seems is once again shifting, this time into an ethical field of practitioner competency, qualifications, conduct, responsibility and personal professional development. This is not to say that the fraudulent sale of miracle cures has ceased or that the exaggeration of practitioner abilities has entirely disappeared. This much will become clear in the following chapter. Neither is it to suggest that all forms of TM and CAM have been welcomed 'into the fold' in either country. We saw how traditional healers are invariably omitted from ongoing efforts to combine traditional and modern medicine in Vietnam, and in the UK those forms of therapy found in group 3 of the House of Lords Select Committee's CAM hierarchy, such as crystallography or radionics, continue to be excluded from state-sanctioned regulatory initiatives on the grounds of 'backward' or 'unverified' healing practices. Indeed, the active hierarchisation of TM and CAM therapies in both countries has been an important feature of the internalisation of dividing practices that I have described in this chapter.

Nevertheless, to the extent that TM and CAM therapies are being mobilised in Vietnam and the UK, what I have argued in this chapter is that this has been made possible by making TM and CAM practitioner *subjectivities* amenable to technical public health interventions. While a practitioner may in the past have been a quack for the mere fact of practicing or even associating with a non-biomedical therapy, today's quack is more one who is deemed to be practicing medicine (whether traditional, complementary, alternative or modern) irresponsibly, incompetently or unscrupulously to the detriment of public health. Yet, if this transformation has opened up a space for a number of TM and CAM therapies in Vietnamese and British national health delivery, it has also unavoidably produced a number of dividing practices *within* these various forms of therapy. In both countries, this ongoing process of formalisation has been the subject of vociferous contestation and debate concerning how best to manage and organise it, which is perhaps not too surprising since practitioners of TM and CAM, who have in the past undoubtedly shared a certain sense of solidarity (in the face of discriminatory state-sanctioned or colonial biomedical monopolies), are increasingly being called upon to distinguish the competent from the incompetent as well as the responsible from the unscrupulous amongst their own ranks. I will now turn my attention to how the production, practice and use of indigenous traditional herbal medicine in Vietnam and the UK have in recent decades come to be normalised in the ways identified here.

4 Bio-politics and the normalisation of herbal medicine

It is perhaps the herbalist who best exemplifies the kind of continued ambivalence that many alternative and traditional practitioners face today.[40] On the one hand, herbalists are revered for their long-founded experience, astute study of the medicinal properties of plants, and considerable contributions to national pharmacopoeias, not least in Vietnam. In the United Kingdom, they are often highlighted for their caring, 'whole person' patient consultations and the herbal medicines they use are described as just about the safest there are, sparing patients from the brutal and toxic side-effects so common in modern pharmaceutical treatment. This is certainly the case with both St. John's Wort and Heantos, which are advocated as low side-effect and more holistic alternatives to the pharmaceutical anti-depressants and 'western' addiction treatment methods otherwise in wide use. 'Natural' by their very vegetable nature, herbal remedies are claimed to be more gentle and agreeable to patients as they go about revitalising the body's own *vis medicatrix naturae*, re-establishing balance and restoring health. In Vietnam, it is argued that traditional medicine, which consists primarily of herbal medicine though often coupled with acupuncture, massage, meditation and various exercise techniques, "offers incontestable advantages [over modern medicine] because it is gentler, less aggressive and less toxic" (Bùi 1999: 30). This sentiment is shared in the United Kingdom where herbalists suggest that their medicine is "a kinder alternative to mainstream medicine [providing] a safe, gentle and effective approach to health care" (NIMH 2004b).

Yet, on the other hand, herbalists have just as often been rebuked for lack of safety and quality controls, and for holding on to 'superstitions' or 'old wives' tales' in their diagnostic and prescribing practices. In a 1983 report on adverse reactions to herbal medicines, the United Kingdom's Department of Health complained that, for all the potential health benefits herbal medicines may hold, "the medical herbalist is at fault for clinging to outworn historical authority and for not assessing his drugs in terms of today's knowledge" (cited in British Medical Association. Board of Science and Education. 1986:

[40] Sections in this chapter concerning Vietnam have been published as "Bio-politics and the promotion of traditional herbal medicine in Vietnam" (Wahlberg 2006).

110). And in Vietnam, while the many rural herbalists who have learned their trade through apprenticeships are without doubt valued for the "treasury of knowledge" they represent, they are also slated for their jealous guarding of "secret" family remedies that are "frequently laden with sorcery and magical practices which conceal a very simple reality and can lead scientists in wrong directions in their research" (Bùi 1999: 35). What is more, the very 'naturalness' of herbal remedies has in recent years been challenged by an increasing number of herbal product recalls by health authorities on the grounds of reported adverse effects due to heavy metal contamination or traces of undeclared synthetic medicines.

It is exactly this paradox – of the gentle yet potentially dangerous 'natural' medicine – that constitutes today's herbal problem. And if we indeed have witnessed a change in public health protection strategies from marginalising to normalising alternative and traditional medicines as I have suggested, then it seems more than plausible to understand what has been happening in the field of herbal medicine over the past few decades in terms of attempts to reconcile this ambivalence. Take, for example, a recent set of WHO guidelines on the "proper use of traditional, complementary and alternative medicine" in which they argue that:

> many consumers have turned to natural traditional medicinal products and practices, under the assumption that 'natural means safe'. However, this is not necessarily the case. A number of reports have revealed examples of *incorrect use of traditional medicines* by consumers, including incidents of overdose, unknowing use of *suspect or counterfeit herbal medicines*, and unintentional injuries caused by *unqualified practitioners*. (WHO 2004a: ix, my emphasis)

While it is certainly clear that both Vietnamese and British traditional herbal medicine have their roots in ancient practices and traditions, we will see in this chapter how it is equally clear that in recent times herbal medicine has come to be appropriated as an object of expert scientific knowledge, which has allowed for it to be recruited as a possible solution to very specific and targeted problems of morbidity and ill health. Nevertheless, traditional herbal medicine remains a public health problem today inasmuch as inconsistencies in terms of product safety, practitioner training and consumer information are seen as deterring rather than promoting public health.

What follows here is a tracing out of a problematisation, an account of how the counterfeit and contaminated *products*, the unqualified and unregistered *practitioners*, as well as the unaware and uneducated *patients* of herbal medicine have come to be seen as public health problems in a Vietnamese, British and also supranational (the WHO and EU specifically) context over the past half-century or so. As such this chapter should not be read as an exhaustive history of the regulation of herbal medicine in these two countries, but rather as a demonstration of how the building up of expert bodies of knowledge about the most "effective", "safe", and "proper" ways of using, producing and practicing traditional herbal medicine has been a requisite part of its recruitment in service of public health in both rural and urban areas. Moreover, this chapter will also show how recent problematisations of the potential dangers of herbal medicine are being played out in very concrete terms, including a range of remedial actions to make the practice and use of traditional herbal medicine compatible with bio-political goals of safeguarding and promoting the public health of British and Vietnamese populations. It is this bio-politicisation of herbal medicine that I will argue has allowed for its 20th century transformation from public health liability into public health resource (at least potentially so) in both countries, albeit with markedly different outcomes.

From herbals to pharmacopoeias

If there is one thing that is agreed upon in an otherwise contested field of herbal medicine, it is that peoples and cultures all over the world have been using plants to treat their ailments for a very long time – the proverbial roots of medicine. Moreover, with most contemporary estimates suggesting that the vast majority of the global population continues to rely on herbs for medicinal needs, the pigeonholing of herbal medicines as 'alternative' in many western countries is often smirked at by its proponents. Yet herbal medicines for the most part remain 'alternative' or 'traditional' as opposed to 'modern' or 'pharmaceutical', even if the industrialisation of healing herbs into what are now commonly referred to as "herbal medicinal products" has increasingly blurred this distinction. And whether in the form of its original starting material (fresh, dried or comminuted leaves, stems, flower buds or bark) or as industrially-produced capsules, tonics or tablets, herbal medicines that are sold for health-related purposes and/or make health-related curative claims have increasingly become subject to safety and standardisation requirements, as a means to assure users and to protect them from the potential dangers that

are both inherent to the 'natural' herbs but also augmented by industrial production practices.

So, what has characterised the push to normalise herbal medicines over the past decades? To begin with, it has required a comprehensive mapping out exercise of botanical enlightenment, designed to put order into the rich yet sometimes chaotic, unsystematic, unscientific and even unwritten records of medicinal herbs that have been used for centuries. In Vietnam, this exercise, which is very much ongoing, began around 1961 with the establishment of the national Institute of Materia Medica, whose task it became to "moderniz[e]… various types of traditional medical formulations" (Vietnam. Institute of Materia Medica. 2004). The key challenges facing the institute's scientists were firstly, that while the experience of the hundreds and thousands of traditional practitioners around Vietnam was invaluable to them, it was often recorded only sporadically and when done, names of plants were given in their vernacular forms which varied from region to region and ethnic group to ethnic group. Moreover, correct harvesting information (which has significant bearing on a herb's medicinal potency) was rarely sufficiently noted. And finally, some herbal remedies were nowhere to be found in the otherwise rich archive of Vietnamese herbal records dating back to Tue Tinh's 14th century classic on *The Miraculous Medicine of the Southern Country*[41] and Lãn Ông's 18th century *Treatise on Medical Knowledge Accumulated by Hải Thượng*, having been "handed down in family circles from father to son, from mother to daughter, [with] secrets… always strictly preserved, particularly among some ethnic minorities" (Bùi 1999: 35). As summarised by Hoàng et al.: "Under the ancient regime, there was never an official pharmacopoeia for traditional medicine. Medical formulas, uncontrolled, developed in a spontaneous and empirical way" (1999: 27).

Faced with these particular challenges, a strategy unique to the Vietnamese setting was devised, at the heart of which were numerous scientific parties that were sent out on botanizing missions "throughout the country, interviewing traditional practitioners and collecting from the elderly many long-forgotten remedies" (Nguyen 1999: 38). Pharmacist Đỗ Tất Lợi's six-volume series on the *Medicinal Plants of Vietnam and their Biochemical Properties* (2001), the result of countless journeys and conversations with traditional

[41] 'Southern' here is in relation to China.

practitioners over a 20-year period starting in 1954, has become a classic of this project, complete with botanical classifications and detailed descriptions of their medicinal uses. The Institute of Materia Medica has also been instrumental in this task, collecting over 8,000 samples, from which 1,850 species have been catalogued according to their vernacular names, scientific names and pharmacological properties (Nguyen 1999: 38). Moreover, the medicinal use of parts of 403 animal species and of 70 minerals have also been recorded by the Institute of Ecology and Biological Resources (Vietnam Economy 2003a). The pioneer efforts of these many scientists and traditional practitioners were central in ensuring a place for herbal remedies and starting materials in the *Vietnamese Pharmacopoeia*, which consists of two codex, one for modern medicines (published by the Ministry of Health for the first time in 1971) and one for traditional herbal medicines (published for the first time in 1976). Moreover, building on four decades of botanical research, the Insitute of Materia Medica has "been able to draw up a distribution map of medicinal plants in Vietnam, with approximate estimates of natural reserves" (Nguyen 1999: 38).

Like Vietnam, the United Kingdom is home to a rich archive of books describing plants and their medicinal properties (known as 'herbals') which can be found scattered throughout the past centuries of publishing history, from John Gerard's *Herball or General Historie of Plantes* (1597), Nicholas Culpeper's *The English Physitian* (1652), Elizabeth Blackwell's *A Curious Herbal* (1739), William Withering's *A Botanical Arrangement of all the Vegetables naturally growing in Great Britain* (1776), Robert John Thornton's *A Family Herbal* (1814), to Albert Isaiah Coffin's *A Botanic Guide to Health and the Natural Pathology of Disease* (1852). The result of meticulous study by their authors, these oft-reprinted books and many other similar herbals have been instrumental in the subsequent botanical identification, classification and description of medicinally used British plant species. Yet, it was these very books that would end up banished to the fringes of medicine by the end of the 19th century, rejected by a growing medical profession as nothing more than collections of old wives' tales that still relied on the doctrine of signatures or astrology for explanations of efficacy. And although the synthetic drugs of modern medicine were ironically enough often developed through the isolation, structure elucidation and chemical transformation of single active compounds found in plants, medical doctors were quick to

contrast their 'purified' medicines with the 'messy' or 'impure' remedies of herbalists as part of their marginalising strategies.[42]

At any rate, it was precisely to counter such charges that herbalists set about publishing a series of updated reference books in the early part of the 20th century. In 1905 the National Association of Medical Herbalists published the first *National Botanic Pharmacopoeia*. A few years later, in 1920, Mathew Robinson published *The New Family Herbal*, underlining that any notion of "the government of Herbs by the sun, moon and planets, has been exploded by modern science; and is now regarded by persons of ordinary capacity to be absurd in the extreme" (cited in Brown 1985: 81). And in 1931, Maud Grieve and Hilda Leyel published what they called *A Modern Herbal*, arguing that "[a]ll serious Herbalists have long realized that a new Herbal is badly needed – a herbal which must include the traditional lore and properties of plants, *and* the modern use of properly standardized extracts and tinctures which were unknown in the days of Gerard and Parkinson, and even in the days of Culpeper, and which have been made possible by the development of modern chemistry" (Grieve and Leyel 1931, my emphasis). These updated reference books covering more than 800 herbs – listed according to botanical name, botanical family, synonyms, parts used, botanical description, constituents, indications, medicinal action, medicinal uses, preparation and dosage – marked important steps in the transformation of the long-standing 'herbal' into a monograph-based pharmacopoeia of herbs and herbal remedies. It would not, however, be until 1965 that efforts to prepare the current *British Herbal Pharmacopoeia* began.

As Griggs has shown, during the drafting of what would become the 1968 Medicines Act, the British Herbal Medicine Association (an interest group of herbalists, manufacturers and retailers formed in 1964) had been informed that "a herb for which a monograph appeared in any standard reference book and was not poisonous" might be exempted from the kind of safety and efficacy evidence requirements that were a precondition for pharmaceutical medicines seeking market authorisation (Griggs 1997: 282). In response, the BHMA quickly put together a Scientific Committee in 1965 made up of pharmacologists, botanists, pharmacists and physicians, who were set the task of bringing order to the rich, yet dispersed and sometimes outdated, information that was available from the various herbals,

[42] See Griggs (1997) for a comprehensive account of the history of herbal medicine in the United Kingdom and other 'western' countries in which these marginalising strategies are accounted for in detail.

as well as other sources of literature on the safety, efficacy and also quality of various medicinal plants.[43] While this committee did not set out on the kind of extensive field expeditions that their Vietnamese colleagues were undertaking at the time, their work did comprise enlightening forays into a whole collection of herbals, recorded case studies and journal articles, in order to chase bibliographic leads and systematically map out individual medicinal plants according to available information on their botanical description, vernacular names, history, medicinal uses, chemistry, indications, side-effects and recommended dosages. The fruits of the BHMA Scientific Committee's labours came in the form of the first British Herbal Pharmacopoeia, which was published in stages starting with 115 herbal monographs in 1976 (the same year that traditional herbal medicines were included into Vietnam's national pharmacopoeia) followed by a further 83 in 1979 and 34 in 1981 (Griggs 1997: 282-83). The British Herbal Pharmacopoeia was the first of its kind in the West, but has since been followed up in Germany where 380 monographs were published by Commission E[44] in the period 1983 to 1995; in the USA where an American Herbal Pharmacopoeia has been under development since 1994; at the European level where the European Scientific Cooperative on Phytotherapy published 60 monographs in the period 1997 to 1999; and most recently at the international level where the WHO has published three volumes of monographs on selected medicinal plants since 1999.

The point to be made is that, whereas herbals and treatises have undoubtedly played a key role in the identification and classification of medicinally useful herbs, the aim of monograph-based pharmacopoeias has been much more one of assurance and safeguarding. That is to say, while herbals and their authors continue to be celebrated to this day for the important contributions they have made, these herbals certainly do not constitute authoritative references on issues of safety, quality and efficacy. As recently argued by the British Pharmacopoeia Commission, a "monograph, taken as a whole, should provide a reliable basis for making an independent judgement as to the quality of the substance in the

[43] It should be noted that while the United Kingdom's 1968 Medicines Act did end up exempting from licensing those non-industrially produced herbal remedies sold without any written recommendations as to their use, manufacturers of herbal remedies were not exempt and were thus in urgent need of a scientific reference book to which they could refer in applications for product licenses (see Griggs 1997: 281-85).

[44] As was the case in the UK, the 1965 European Council directive on medicinal products sparked a national review of medicines regulation in Germany, eventually leading to the passing of a Second Medicines Act in 1976. In order to ensure that all medicines sold on the German market were in compliance with this new act, the German Federal Institute for Drugs and Medical Devices (BfArM) established 15 commissions to review available quality, safety and efficacy data, the so-called Commission E being responsible for the review of herbal medicines.

interests of the protection of the public" (British Pharmacopoeia Commission 2004). Hence, the ordering and updating of information on medicinal plants and herbal remedies as witnessed in the mapping out efforts of scientists in Vietnam, the United Kingdom and indeed throughout the world – i.e. the conversion or updating of herbals and treatises into monograph-based pharmacopoeias – has been a prerequisite first step in the normalisation of herbal medicines.

The natural, the contaminated and the counterfeit

As already noted, herbal medicine is often presented as a gentler, kinder and more 'natural' alternative to modern pharmaceuticals, not least in terms of the marketing of herbal medicinal products today. Advertisements and packaging labels often hail these products as '100% natural!', 'organic', 'conventionally grown' or 'wild crafted', while citing evidence of low toxicity and good efficacy from published scientific research and clinical trials. Indeed, what could be more natural than the plants that grow around us? Moreover, herbalists also point to long histories of use as a sound indication of both safety and efficacy (why otherwise would these remedies still be around today, they ask), an argument that has not gone unheeded in recent regulatory efforts aiming to regularise the sale of herbal medicinal products.

But a lot has happened since the days of Tue Tinh, John Gerard, Nicholas Culpeper and Lãn Ông. Perhaps most significantly, while herbal medicine has long been a commercialised field of patent medicines and medicinal plant markets, over the past century or so it has transformed into a highly-technologised, multi-million dollar industry. Inspired by the pioneer work of German natural products chemists and companies in the 1920s and 1930s,[45] the industrialisation of medicinal plants into what have come to be known as 'phytomedicines' has developed into a global activity with supply chains spanning all the world's continents. Indeed, the late 20th century 'boom' in herbal medicine, often cited as evidence of the growing popularity of alternative and traditional medicines, refers in large part to rapid rises in the sales figures for phytomedicines throughout the 1980s and 1990s (see Gaedcke and Steinhoff 2002; Richter 2003). For this reason, a good part of recent regulatory attention has been directed at industrially produced herbal medicines, rather than the dried, comminuted or crushed starting materials (leaves, buds,

[45] See Timmermann (2001) and Kenny (2002) for discussions on how companies like Madaus, supported by the National Socialist regime took the lead in researching and industrially developing herbal medicines.

flowers, stems, bark, etc.) from which extracts are prepared and active ingredients isolated and purified for industrial mass production. Nevertheless, growing interest in herbal medicine has meant that all parts of the herbal medicine production chain have come under renewed regulatory scrutiny.

If we look at the past few decades worth of measures to regulate the production and sale of herbal medicinal products in both the United Kingdom and Vietnam, it is clear that safety and quality concerns have been at the fore, much more so than the purported (lack of) efficacy of these products. This regulatory focus on safety and quality issues has no doubt been a bi-product of the increased demand for herbal medicines that both countries have experienced since the 1960s,[46] coupled with the increasing industrialisation of these herbal medicines into tinctures, capsules or tablets, augmenting risks of contamination and adulteration. In the wake of these global trends and in contrast to claims of a gentler, kinder and more natural herbal medicine, regulatory authorities are increasingly advising consumers, firstly, that 'natural does not necessarily mean safe' and, secondly, that in some cases these medicines are turning out to be 'not so natural after all'. A report from the UK Herbal Medicine Regulatory Working Group outlines the reasons why:

> For a long time… medicines law… left herbal medicine essentially unregulated in terms of quality and safety… But in recent years, along with a rapid expansion of the herbal sector, questions have arisen about the quality and safety of some herbal products. These questions have been variously associated with (a) adverse effects resulting from the inherent toxicity of certain herbal ingredients (natural does not always mean safe); (b) misidentification or substitution of one plant species for another, in some cases leading to the substitution of a safe with a toxic species; (c) adulteration of herbal medicines with prescription-only drugs or heavy metals; (d) microbial or fungal contamination of herbal remedies; (e) discovery of possible herb-drug interactions which may interfere with or confuse the results of treatment; (f) insufficient information provided to the consumer concerning the safe use of a herbal medicine. (Great Britain. Department of Health. European Herbal Practitioners Association. Prince of Wales's Foundation for Integrated Health. 2004: 142)

It seems, then, that the (re)popularisation and industrialisation of herbal medicines has been a bitter-sweet process. Notwithstanding improvements in quality, dosage-consistency and

[46] Although herbal medicine has clearly never been marginalised in Vietnam to the extent it has been in the United Kingdom, as noted in the previous chapter, colonial policies had a definite negative impact on the supply and practice of traditional medicine in Vietnam, especially in urban areas. As a result, commentators in Vietnam often refer to a 'revival' in interest and use of traditional medicine that started somewhere around the 1960s (see Hoàng, et al. 1999; Vietnam News 2003)

shelf-life, the development of phytomedicines has also removed both patient and practitioner from the vicinity of the 'naturally growing' medicinal plants themselves, thereby increasing opportunities for the contamination, adulteration and violation of the 'natural', as these medicinal plants are increasingly mass-cultivated, harvested, dried, transported, extracted, treated, manufactured into tablets and then packaged before they reach practitioner or user. So, while some oft-used herbal medicine ingredients such as ephedra[47] have been charged with causing adverse reactions in their unadulterated, 'natural' forms due to an inherent toxicity,[48] it is by far the industrially relevant problems of substitution, contamination and adulteration that have come to shape the regulation of herbal medicinal products in recent years. So much so that documenting a herbal medicine's long history of use is no longer necessarily a sufficient indication of safety, a point that was highlighted in the European Council's first directive on traditional herbal medicinal products from 2004, due for implementation in the UK in 2005:

> Even a long tradition does not exclude the possibility that there may be concerns with regard to the product's safety, and therefore the competent authorities should be entitled to ask for all data necessary for assessing the safety. [Moreover,] the quality aspect of the medicinal product is independent of its traditional use so that no derogation should be made with regard to the necessary physico-chemical, biological and microbiological tests. (European Council 2004: §5)

Even in a country like Vietnam, where the majority of herbal medicine users continue to live in rural settings often growing medicinal plants in their own gardens, safety concerns brought on by the global industrialisation of herbal medicine have not gone unnoticed. In large part, this is because the strategy to modernise Vietnamese traditional medicine launched by President Ho Chi Minh in the 1950s has included a large-scale programme to industrialise a great number of the most used and most relevant herbal remedies in the country: of the over 10,000 medicines that had been authorised for sale on the Vietnamese market by 2004, over 2,000 were classified as herbal medicines (Vietnam. Institute of Drug Quality Control. 2004); the Institute of Materia Medica whose mandate it has been to

[47] Ephedra is a "naturally occurring substance" that was banned by the Food and Drug Administration in December 2003 for presenting an "unreasonable risk" to the public on the basis of adverse reaction reports that suggested ephedrine-alkaloids were responsible for raising blood pressure and stressing the body's circulatory system (United States. Food and Drug Administration. 2003).

[48] And in fact, when inherent toxicity is to blame for adverse reactions this has often come about because of an initial misidentification and substitution of medicinal plant species (cf. Great Britain. Department of Health. European Herbal Practitioners Association. Prince of Wales's Foundation for Integrated Health. 2004)

modernise traditional medical formulations has developed "thousands" of industrially produced herbal remedies since the 1960s (Bui 2004); and, finally, the harvesting and cultivation of medicinal plants for both export and national use has become a lucrative business (Vietnam Economy 2003b). It was for these reasons that the Ministry of Health, after consultations with the WHO and other national health authorities in the region, approved Decision 371/BYT-QD on the 12th of March 1996 introducing new requirements for the safety and efficacy of herbal medicines (Vietnam. Ministry of Health. 1996). These regulations require that any new herbal medicine applying for marketing authorisation must undergo a series of tests to see whether the product meets quality, safety and efficacy standards. Product samples must be sent to the national Institute of Drug Quality Control (IDQC), where one out of four quality control laboratories is specifically dedicated to herbal medicines. Laboratory scientists will then carry out tests to authenticate (as best as possible) declared plant species and composition, chemical analysis, microbial and heavy metal contamination tests, chronic toxicity tests, sub toxicity tests and pharmacological studies.

One of the major safety concerns to have come out of the industrialisation of herbal medicines in Vietnam has been the deliberate, illegal lacing of traditional herbal medicines with synthetic medicines for increased potency. Such blends are classed as "counterfeit drugs" in Vietnam, and their manufacturers are the target of counterfeit-combating programmes, whereby detection of adulteration at the laboratories of the IDQC can lead to an immediate product recall by the Ministry of Health as well as fines to the manufacturer (Vietnam. Institute of Drug Quality Control 2003). At the same time, however, the mandate of the IDQC is not limited to industrially manufactured herbal medicines, but also includes the "raw materials" or starting materials of herbal medicine. The IDQC laboratories receive samples from a number of markets for medicinal plants on a weekly basis, the quality of which is checked against 'control profiles' that have been compiled over the years. The IDQC can also, in principle, make unannounced calls on the dispensaries of traditional herbalists in order to control the quality of herbal ingredients being prescribed to patients, especially in terms of pesticide or heavy metal contamination, as many of the most popular herbs are by now mass-cultivated using modern agricultural techniques. The clandestine import of significant quantities of medicinal herbs and products from China and other parts of the region, which have not been subject to any quality controls, has also been identified as a safety concern (see World Bank 1993: 46).

The point here is not that a once 'natural' practice of taking herbal medicines in Vietnam has now become saturated with rules and regulations where regulators leave no stone unturned, from the urban centres to the remotest of rural villages (if for no other reason than lack of resources).[49] Rather, it is to demonstrate how problematisations of the safety and quality of otherwise "less aggressive and less toxic" traditional herbal medicines of Vietnam are being played out in very concrete terms in the face of global industrialisation. This has happened through the introduction of such normalising measures as the Ministry of Health's new safety and efficacy requirements for herbal medicines, Good Manufacturing Principles to be followed by herbal medicine manufacturers, as well as sustainable cultivation and harvesting programmes to preserve medicinal plant species (see Nguyen 1999). If the safety and quality of herbal medicine is going to be ensured and improved in Vietnam, former Director of the Institute of Materia Medica, Prof. Dr. Nguyễn Văn Đàn argues that "as well as traditional methodology we need to utilize new processing methodology with modern facilities and technology and the most advanced methods of quality control" (Nguyen 1999: 48).

Three decades after the 1941 Pharmacy and Medicines Act had revoked the right of herbalists in the United Kingdom to supply herbal medicines to patients on the grounds of protecting the public, the 1968 Medicines Act[50] ended up reversing this decision by exempting herbal medicines from the need for marketing authorisation if one of two specific sets of conditions were met. Section 12.1 of the Act exempted non-industrially manufactured herbal remedies that were assembled or combined on the premises of a herbalist as a direct consequence of a one-to-one consultation. Moreover, the plants included in these remedies could only be dried, crushed or comminuted, the remedy could not be sold with any written instructions as to its use, and the remedy designation could only specify the plant or plants included and possibly the process of their combination.

[49] Indeed, even following the introduction of the 1996 safety and efficacy requirements, the vast majority of licensed herbal medicines on the Vietnamese market have not been controlled against these standards (Bui 2004).

[50] While it is outside the scope of this dissertation to discuss this in detail, it is important to note that an increasing focus on safety *and* efficacy in herbal medicine should be understood in the context of the Kefauver-Harris Amendments of 1962 in the United States, the European Council Directive 65/65/EEC on medicinal products from 1965 and the 1968 Medicines Act in the UK, all of which arose on the back of the thalidomide scandal of the early 1960s. The subsequent rise of randomised controlled trials (RCTs) into a 'gold standard' as well as evidence based medicine (EBM) are also key (see Griggs 1997; Kaptchuk 1998a; Willis and White 2004).

There was also an exemption in section 12.2 for pre-prepared herbal remedies that were "non-industrially" produced according to traditional methods (drying, crushing or comminuting), which could be sold over-the-counter provided that no brand name, curative claims or usage information was written on the product. These exemptions were possible because of a 1965 European Council directive definition of medicinal products as "industrially produced" products that were either "presented for treating or preventing disease in human beings or animals", or that "may be administered to human beings or animals with a view to making a medical diagnosis or to restoring, correcting or modifying physiological functions in human beings or in animals" (European Council 1965: Article 1.2), as well as following the work being carried out by the BHMA Scientific Committee to produce medicinal herb monographs. If an industrially produced herbal medicine did fall under the Council's definition, and this was the case for an increasing number of phytomedicines, then the product would have to apply for a marketing authorisation in the same costly and time-consuming manner that conventional medicines did, if not it would be exempt.

However, as sales of herbal medicines began climbing from the 1970s onwards, regulatory authorities in the UK began voicing concerns over the lack of quality controls in the unlicensed herbal sector, i.e. those herbal remedies that were being sold via the section 12 exemptions. Apart from sales restrictions on certain toxic plants, no regulatory measures existed to ensure the safety and quality of those herbal remedies being provided through one-to-one consultations with herbalists, or of those traditionally prepared herbal remedies being sold over-the-counter. Moreover, production methods for section 12.2 over-the-counter herbal medicinal products were becoming increasingly sophisticated, bringing into question the distinction between non-industrially and industrially produced products (Great Britain. Medicines and Healthcare products Regulatory Agency. 2004a: 26). By the 1990s, a number of reports of adverse reactions resulting from the intake of (especially contaminated and adulterated) herbal medicines were being published in scientific journals and media, ultimately leading to the enforced prohibition or recall of certain herbal medicinal products in many different countries.[51] The situation was deemed sufficiently

[51] For example, in 2003, herbal products containing ephedrine were prohibited by the Food and Drug Administration in America, products manufactured by Pan Pharmaceuticals in Australia were recalled following a number of reports of adverse effects (the largest product recall ever in Australia), and in the United Kingdom the unlicensed sale of Kava-kava was prohibited by health authorities.

critical by 2002 for the Medicines Control Agency to announce that it had finally "reached a wide measure of agreement with the UK herbal sector that the current arrangements for unlicensed herbal medicinal products do not afford sufficient protection for public health and that there is a need to improve the regulatory position" (Great Britain. Medicines Control Agency. 2002: §4).

How exactly to improve this regulatory position has been the subject of a great deal of debate and disagreement between herbalists, health authorities, herbal manufacturers and consumers. And although it is difficult to predict what the final outcome of a new herbal regulatory regime will look like, a few initiatives have already been implemented suggesting a provisionally threefold classification of herbal medicines. Industrially produced herbal medicinal products that fit under the European Council's definition of a medicinal product in the updated "Directive 2001/83/EC on the Community code relating to medicinal products for human use" will have to apply for marketing authorisation on the basis of the same kind of safety, quality and efficacy documentation that is required of conventional pharmaceutical products. However, with the adoption of Directive 2004/24/EC on "traditional herbal medicinal products", a new class of herbal medicines and consequently a new form of authorisation has been introduced, which is currently in the process of superseding the section 12.2 exemption for over-the-counter herbal remedies in the United Kingdom.

Directive 2004/24/EC allows for "a special, simplified registration procedure for certain traditional medicinal products", which can now be classed as "traditional herbal medicinal products" and are distinguished by having "been in medicinal use for a sufficiently long time, and hence are considered not to be harmful under normal conditions of use" yet, "despite their long tradition, do not fulfil the requirements of a well-established medicinal use with recognised efficacy and an acceptable level of safety" (European Council 2004: §6, §8, §3). For this new class of products scientific documentation of its "traditional use" can be used as proof of safety, although because of the many safety concerns outlined above, national health authorities retain the right to request additional data before authorising it for sale. As far as quality is concerned, there are no concessions as all medicinal products (whether herbal or not) must comply with quality standards defined in relevant pharmacopoeias. Requirements of proof of efficacy for these products have, however, been reduced to the condition that "the pharmacological effects or efficacy of the

medicinal product are *plausible* on the basis of long-standing use and experience" (European Council 2004: Article 16a.1e, my emphasis),[52] and consequently that it is clearly stated on product packaging or labelling that "the product is a traditional herbal medicinal product for use in specified indication(s) exclusively based upon long-standing use" (European Council 2004: Article 16g.2a). By requiring those over-the-counter products that have previously accessed the UK market through the section 12.2 exemption to apply for "traditional herbal medicinal product" status, it is argued that at least part of the gap in UK herbal safety and quality control can be plugged.

Nevertheless, a final class of unlicensed herbal remedies in the United Kingdom remains, i.e. those that are combined or assembled on site as a direct result of a one-to-one consultation. But even this class of herbal remedies has come under pressure with an increasing number of calls to put effective safety and quality controls into place. In a recent consultation document prepared by the Medicines and Healthcare products Regulatory Agency, it is argued that the section 12.1 exemption in its current form "lead[s] to inadequate public health protection", because "how can herbalists be assured that the raw or processed ingredients that they purchase for use in Section 12.1 remedies are of acceptable quality?" (Great Britain. Medicines and Healthcare products Regulatory Agency. 2004a: 31, 43) The consultation is ongoing and proposals to remedy the inadequate public health protection provided by Section 12.1 include the MHRA's suggestion that "a supplier of partially processed active ingredients could apply for a certificate of Good Manufacturing Practice (GMP)" (Great Britain. Medicines and Healthcare products Regulatory Agency. 2004a: 44) and the European Herbal Practitioners Association's proposal that the section 12.1 exemption should only apply to registered herbalists who "work to an agreed herbalists' Code of Conduct (analogous to the Pharmacists' Code) setting out Good Practice, for example over the use of reliable suppliers" (European Herbal Practitioners Association 2004: 1).

And so, although it is pointed out that "in general, most herbal medicinal products are unlikely to pose a significant threat to human health" (Great Britain. Medicines Control Agency. 2002: A.2) and that they "cause fewer adverse events than conventional therapies

[52] We will be returning to this notion of plausibility in detail in chapter 6.

such as treatment with conventional medicines (pharmacotherapy)" (WHO 2004a: 2),[53] safety and quality concerns brought on by the industrialisation of herbal medicine have increasingly become the target of regulatory initiatives. The unregulated prescription, sale and use of 'natural', contaminated or adulterated herbal remedies is by now considered enough of a threat to warrant concrete normalising measures to protect the public health, as we have seen in both the Vietnamese and the British context. These have included: the compilation of herbal monographs and pharmacopoeias to minimise the risk of accidental substitution of medicinal plant species for inherently toxic ones; the introduction of Good Manufacturing Principles to limit possibilities of microbial contamination during production; the launching of "counterfeit drug" combating actions such as product recalls to punish manufacturers who deliberately adulterate their herbal remedies with prescription-only drugs; the introduction of elevated safety and quality requirements for any herbal remedy aimed for sale on the market (whether over-the-counter or prescription-only); as well as the introduction of sustainable harvesting practices to limit heavy metal and pesticide contamination.

"Incompetent and dangerous practitioners"

Notwithstanding my suggestion that quackery has been transformed in the past few decades opening up new roles and possibilities for alternative and traditional practitioners, as we saw earlier, the problem of dangerous practice is far from becoming redundant in herbal medicine today. However, rather than affecting the occupation in its entirety as was the case to a much greater extent in early 20th century Vietnam and Britain, incompetent and dangerous practice is now increasingly being addressed as a problem within herbal medicine itself – a consequence of the internalisation of dividing practices that I have spoken of. Hence, not only have the plants and products of herbal medicine been subject to a range of regulatory measures aimed at safeguarding the public, so too have the herbal practitioners who are in the business of prescribing and dispensing these products and remedies. As discussed in the previous chapter, a number of traditional and alternative therapies are currently installing self-policing procedures that many argue amounts to a professionalisation of their occupations as herbalists, acupuncturists, traditional medicine practitioners or homoeopaths. Increasing demands for their services have led to increasing

[53] Griggs even argues that "the unrestricted over-the-counter sale of common pain killers such as aspirin or paracetamol probably pose a far greater threat to the public's health than all the herbal remedies and herbalists' prescriptions put together" (1997: 285).

demands for professional accountability and liability, as well as protection from incompetent or unscrupulous practitioners (Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000: 6.1). In the words of Prime Minister Tony Blair, "patients have a right to expect that the person who treats them is up to the job, government has a duty to ensure that they are" (cited in Great Britain. Department of Health. European Herbal Practitioners Association. Prince of Wales's Foundation for Integrated Health. 2003: 7), and in the United Kingdom and Vietnam this is by now, for the most part, regardless of whether that person is a medical doctor or a herbalist.

However, as already underlined, there are striking differences as to the form and context of such measures of (self-)policing, from therapy to therapy and from country to country. This is certainly the case when looking at what has been happening with herbal medicine in Vietnam compared with the United Kingdom in the past few decades. In Vietnam, where a 1999 Ordinance on the Protection of Consumer Interests underlined that during the course of using any goods or services a citizen's "safety of life, health and environment shall be protected" (Vietnam. Ministry of Health. 1999b: Article 8), regulating the practice of traditional herbal medicine has been an integral part of the Vietnamese government's programme to modernise and integrate traditional medicine into national health delivery since the 1950s. As a result, Vietnam is one of the few countries in the world that is seen to be having an integrated approach to healthcare.

We saw in the previous chapter how officially recognised traditional medicine practitioners in Vietnam have been classed into three different groups: an ageing group of 'purist' practitioners of classic Northern medicine (*thuốc bắc*), some 8,000 or so practitioners who have either specialised in traditional medicine at Vietnam's medical colleges (Medical Doctors) or been trained at the Tue Tinh schools of traditional medicine (as Assistant Doctors), and finally a large group of apprentice-trained practitioners (so-called 'herb doctors') of Southern medicine (*thuốc nam*) who may also be familiar with Northern medicine.[54] In today's Vietnam, it is by far the latter two groups who provide the majority of herbal medicine treatment, and for this reason it is worth looking at the ways in which their ability as practitioners has come to be problematised over the past decades.

[54] There are about 40,000 biomedical doctors compared to anywhere between 30 and 70,000 apprentice-trained traditional practitioners in Vietnam (see chapter 3).

As we have already seen, traditional medicine was actively discouraged and scorned by colonial authorities in the early 20th century during which time there was a decline in systematic training of traditional practitioners. As a direct means to address this imbalance, the Vietnamese government began their efforts to fully integrate traditional medicine and its practitioners into national systems of healthcare delivery, education and research. This integration has happened via two specific routes: firstly, by making both modern and traditional medicine compulsory components of medical education and practice in Vietnam; and, secondly, by the organisation of 'herb doctors' into national associations as well as the development of a licensing system for these practitioners. From the outset of modernisation efforts, the Ministry of Health has stressed that central to their plans was cooperation between modern and traditional medicine practitioners. Four years after they had established a National Institute of Traditional Medicine in 1957 mandated with preserving and reviving traditional medicine, the Ministry of Health inaugurated what was to be the first of several Departments of Traditional Medicine at the Hanoi Medical College in 1961. All seven of Vietnam's medical colleges now have such a department, and all students of medicine are required to follow sixteen compulsory courses in traditional medicine (covering classical theory, diagnostics, medical botany and acupuncture) in the first four years of their degrees. Students can then choose to specialise in traditional medicine in their final two years (World Bank 1993: 30). Outside of Vietnam's medical colleges, the Tue Tinh secondary colleges of traditional medicine (the first of which was established in Hanoi in 1971) offer three-year "Assistant Doctor" diplomas, which likewise cover both modern and traditional medicine as well as providing further education and 'refresher courses' in the theory and practice of traditional medicine for practicing medical doctors (World Bank 1993: 31).

Traditional medicine graduates from both the medical colleges and the secondary colleges are destined for work in the extensive network of health services found at national, provincial, district and commune levels in Vietnam. Further to the 40 or so specialised national and provincial hospitals of traditional medicine, the Ministry of Health stipulated by decree in 1976 that each district hospital was to have a department or section specialising in traditional medicine.[55] Finally, it is also governmental policy that each commune clinic strive to have at least one staff worker specialised in traditional medicine,

[55] These sections are often staffed by Assistant Doctors, although some medical doctors who have specialised in traditional medicine also work at this level.

responsible also for keeping a garden of medicinal herbs. Nevertheless, although the majority of Vietnamese people do have access to health care through either their local commune clinic, district hospital or provincial hospital, 'herb doctors' (apprentice-trained rather than college-educated traditional practitioners) continue to play an important role in the delivery of healthcare, especially in rural areas of the country.

Herb doctors will often work in cooperation with commune clinics and district hospitals, but they constitute a separate category of traditional practitioner, subject to different practice requirements. A good share of these practitioners is represented by the National Association of Traditional Practitioners, which was founded in 1957 and has since expanded at the provincial and district levels. On the one hand, these associations of traditional medicine have played an important role in national efforts to map out medicinal plants and their uses in Vietnam, while on the other their members continue to train apprentices and provide medical services to patients via private practices, especially at commune and village levels. However, as we saw in chapter 3, the qualifications and competences of private traditional practitioners has become the subject of a series of ordinances and circulars since the early 1990s. In principle, all 'herb doctors' are now required to register their practices with provincial or district health authorities, and to apply for a practicing license in accordance with the Ordinance on Private Medical Practice and Pharmaceutical Practice as well as various follow up circulars from the Ministry of Health. As noted in a report for the World Bank, "a strong thrust of [this] legislation is to ensure that practitioners are properly qualified" (World Bank 1993: 41).

Since July 1999 when Circular 13/1999/TT-BYT "guiding the implementation of the ordinance on the practice of private medicine and pharmacy as regards traditional medicine" came into effect, in principle all practitioners and dispensers of traditional medicine must be certified by the Ministry of Health. This circular further distinguishes between apprentice-trained traditional practitioners on the one hand, and traditional medicine pharmacists, producers, traders and raw materials (medicinal plants) dealers, all of whom are legally obliged to be certified on the other. Where apprentice-trained traditional practitioners are concerned, certification applicants are subject to an examination organised by health authorities in cooperation with provincial or district associations of traditional practitioners where their knowledge of fundamental theories of traditional medicine, biomedical pathology, pharmacology and ancient medical prescriptions are put to

the test (Vietnam. Ministry of Health. 1999a). Yet, this process of registering and certifying apprentice-trained practitioners is, however, for the most part only in its beginnings as by 2003 the Ministry of Health had 'only' licensed 3,715 private practices of traditional medicine (Huu and Borton 2003: 89), in sharp contrast to the estimated 20,000 members of the national Association of Traditional Practitioners.

Nevertheless, whatever the gaps between regulatory intentions and outcomes, it is clearly this group of apprentice-trained traditional practitioners (as well as traditional pharmacists and traders of medicinal plants) who have come under increasing scrutiny in the past decade or so, especially as regards their training and qualifications. Although they are often highlighted for the important role that they can and should play in the provision of especially primary health care, a number of concerns about the abilities of apprentice-trained traditional practitioners have been raised. For example, the WHO in Vietnam lists as key concerns that: their explanations of efficacy can appear "mysterious"; some practitioners are not sufficiently qualified while others overstate their abilities; their lack of knowledge of modern medicine can be harmful to patients; and that they tend to keep their 'know-how' secret (WHO 2004b). In light of these kinds of concerns, Bùi has argued that "if traditional practitioners are to play an effective role in health care, it is necessary to advance their professional skills" (Bùi 1999: 33). And although, as already mentioned, this is a process that has only just begun, proposals and initiatives for addressing these concerns are plentiful, including the World Bank's suggestion that "concerns about qualifications could be offset by increasing on-job training for private practitioners" (World Bank 1993: 42), the above-mentioned Ministry of Health circulars and ordinances regarding the private practice of traditional medicine, as well as the WHO's call for "a distance learning programme… in response to the urgent need to upgrade the skills and knowledge of Traditional Medicine doctors working at provincial and district levels" (WHO 1997: 4). The various Traditional Medicine Associations and Secondary Schools of Traditional Medicine have also responded to these concerns by providing training courses and refresher courses for members, for example in the basics of anatomy and physiology (Bùi 1999: 33; Huu and Borton 2003: 61).

In contrast to their counterparts in Vietnam – where there are comparable numbers of traditional and modern practitioners – herbalists in the United Kingdom make up a minority of those providing health services for the many reasons already outlined in the previous

chapter. There are an estimated 2,000 practicing herbalists in the United Kingdom compared to 98,000 or so medical doctors (Great Britain. Department of Health. European Herbal Practitioners Association. Prince of Wales's Foundation for Integrated Health. 2003: 15). Moreover, while herbal medicine has enjoyed considerable, if fluctuating, public support over the past century in the UK, unlike in Vietnam it has remained separate from the National Health Service and from the curricula of most national medical universities and colleges.[56] For these reasons, recent efforts to regulate the practice of herbal medicine in the UK have been more characteristic of a professionalisation of herbal medicine into an independent occupation, rather than an integration of it into existing national health delivery structures. Nevertheless, problematisations concerning the abilities and qualifications of its practitioners have been just as pertinent in the UK as they have been in Vietnam.

The organisation of herbal medicine practitioners into associations that look after the interests and training of its members in the UK goes back at least to 1864 when the National Association of Medical Herbalists (later the National Institute of Medical Herbalists, NIMH) was formed. And ever since its Memorandum of Association came into force in 1895, they have distinguished between qualified and unqualified herbalists, actively sought "to train Medical Herbalists", worked "to repress malpractices", as well as investigated cases of "unprofessional conduct" through a General Council of Safe Medicine (Brown 1985; NIMH 1979). In lobbying for a Medical Herbalists Bill, the Association argued that "it is our desire to compel a standard of Education and Registration so that the public shall be enabled to differentiate between Bona Fide Herbalists and those who trade on the name" (cited in Griggs 1997: 262). Yet, as we saw earlier, this distinction did not gain official sanctioning during the first half of the 20th century and was firmly opposed by the medical establishment. In an increasingly hostile environment, they also struggled to finance a herbal medicine school that could ensure consistent training standards for its members. Indeed, Griggs has argued that what British herbalists faced in the period spanning the end of the 19th century to the mid 20th century was nothing short of "continuous… harassment, vexation and attempted legal suppression by the medical

[56] In this connection it is important to note that the NIMH rejected an offer from the post WWII Labour government to become a part of the NHS as subordinates to biomedical doctors (see Griggs 1997: 265-6).

establishment" (1997: 234).[57] The situation had become so dire by the late 1960s that, as the story goes, there were only a handful of actively practicing herbalists left.

All this would change in the early 1970s as herbal medicine in the UK experienced the kind of tangible revival that has been common to so many different forms of CAM therapies in so many different countries. After intense lobbying, herbalists had secured the Section 12 exemptions discussed above, relieving herbal remedies provided through one-to-one consultations with herbalists and 'traditionally prepared' over-the-counter herbal medicines from the expensive safety and quality requirements that other medicinal products would have to adhere to. In the following years and then decades, sales of herbal medicines, the number of schools providing training in herbalism and consultations with herbalists all surged in tandem with an increasingly active medical counter-culture (Griggs 1997; O'Sullivan 2005; Saks 2003). It is this significant increase in public use of herbal medicine, coupled with traditions of self-regulation dating back to the formation of the NIMH as well as the herbal safety issues outlined above, that have made it a priority candidate for regulatory efforts to protect the public from its "dangerous and incompetent" practice (see chapter 3).

The NIMH, by far the largest of herbal practitioner organisations today with over 500 members (Great Britain. Department of Health. European Herbal Practitioners Association. Prince of Wales's Foundation for Integrated Health. 2003: 12), has in many ways pre-empted the debates which the House of Lords Select Committee set in motion with their November 2000 report on CAM. Already in 1991, the NIMH introduced a binding Code of Ethics, Code of Practice and Disciplinary Procedures, which was followed up by the formation of an NIMH Accreditation Board in 1994 to assess standards in the training of Medical Herbalists. Training to become a herbalist by an accredited institution in the UK today, includes courses in the theories and diagnostic practices of both herbal and bio-medicine, including anatomy, physiology and pathology.[58]

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[57] To the great frustration of herbalists, as Brown reflects citing the president of the Association who in 1927 lamented that: "there have been occasions when depression has seized me, and I have realised how powerful are the forces arrayed against us" (Brown 1985: 86).

[58] The Scottish School of Herbal Medicine makes the points that: "If we want to continue to enjoy our right in this country for trained Medical Herbalists to have the right of primary diagnosis (a licence which is unique in Europe and perhaps even in the 'developed' world), we have to acquire a high level of orthodox clinical skills. To this end, the first two years of the course contain, alongside Herbal Science, a fair degree of Anatomy, Physiology and Pathology" (The Scottish School of Herbal Medicine 2006).

Yet, the NIMH has certainly not been alone in its endeavours to organise and train herbal practitioners, as further to the NIMH the past century has also seen the formation (and in some cases gradual demise) of a Society of United Medical Herbalists of Great Britain (1877), a Society of Herbalists (1927), a Botano-Therapuetic Institute (1931), a British Herbal Union (1930s), an International Register of Consultant Herbalists (1960), a British Herbal Medicine Association (1964), a College of Practitioners of Phytotherapy (1982), and an Association of Master Herbalists (1996). Common to these many different organisations has been that most of their members have been practitioners of a tradition of herbal medicine indigenous to the United Kingdom – often referred to as 'western herbal medicine' to acknowledge transatlantic and continental influences – whose father figures include Gerard, Culpeper and Coffin (see Brown 1985; Griggs 1997).

Moreover, in more recent years, an additional component of new medical pluralism has manifested itself in the UK, i.e. the consolidation of various herbal medical practices rooted in the cultural traditions of immigrant ethnic communities, such as Ayurveda, Traditional Chinese Medicine and Traditional Tibetan Medicine. Consequently, during the past two decades, a Register of Chinese Herbal Medicine (1987), a College of Tibetan Medicine (1993), an Association of Traditional Chinese Medicine (1994), an Ayurvedic Medical Association (1996), a British Ayurvedic Medical Council (1999), a British Society of Chinese Medicine (2001), and even a Unified Register of Herbal Practitioners[59] (1997) have been formed. And a still further complicating factor in this growing collection of associations and councils is the fact that many herbalists will at the same time practice acupuncture, iridology, aromatherapy or naturopathy which are considered separate disciplines.

In the face of such plurality/fragmentation and recalling the House of Lords Select Committee's recommendation to help the public to know where to look by bringing fragmented professional bodies together, the formation of a Herbal Medicine Regulatory Working Group in 2001 was perhaps inevitable. The Working Group was put together as a joint initiative of the Department of Health, the Prince of Wales's Foundation for Integrated Health and the European Herbal Practitioners Association, and includes representation from

[59] For Western, Chinese and Ayurvedic herbal practitioners.

no fewer than 11 herbal medicine organisations, representing some 1,500 practitioners, with a mandate to come up with proposals for the statutory regulation of the herbal medicine profession as a whole.

While it is too early to say anything about the final outcome of this ongoing process of unifying and formalising herbal medicine practitioners, what is beginning to emerge from this ensemble of self-regulatory initiatives is a steadily growing body of expert knowledge that is to be entrusted to a Council of some form and that will eventually provide the legal grounds for determining minimum levels of competence for those wishing to be registered as "herbalists" (with due specifications for Western, Chinese and Ayurvedic forms of it), standards of ethical and responsible practice of herbal medicine, as well as disciplinary mechanisms for excluding and/or penalising "unacceptable professional conduct" by registered herbalists (Great Britain. Department of Health. European Herbal Practitioners Association. Prince of Wales's Foundation for Integrated Health. 2003: 17-21). The justification for introducing such exclusionary measures has been recently summed up by the Prince of Wales's Foundation for Integrated Health: "It is important to remember that anything that has the power to help you could also cause harm if taken unnecessarily or provided by an untrained or insufficiently trained person" (Prince of Wales's Foundation for Integrated Health 2005: 7). In other words, at stake is a Council that would help members of the public as well as health authorities distinguish the competent, responsible and qualified from the dangerous, irresponsible and incompetent, while at the same time ensuring that registered practitioners live up to certain minimum training standards and continue to professionally update their own skills.

Where for many years it was possible for anybody to set up shop as a 'herbalist' in the UK, or as a 'herb doctor' in Vietnam, increasingly such practice is requiring either registration with a representative regulatory body (as has been suggested in the UK) or licensing with local health authorities (as is being introduced in Vietnam). This is not to say that herbal medicine is no longer practiced outside the bounds of a self-regulated or licensed profession, rather it is to suggest that the practice of herbal medicine by untrained, unregistered or unlicensed practitioners is increasingly being problematised as a public health concern and as a direct result of this, a number of initiatives have been taken in both countries to restrict their ability to do so, at least under a protected title. And so, not only are herbal medicinal products considered potentially dangerous to the public, so too are the

herbal practitioners that dispense them, as it is now argued that inadequate training can lead to: an increased likelihood of misidentifying and substituting a potent for a toxic medicinal plant; exaggeration of efficacy claims; unwillingness to recognise the limits of their competence (e.g. when attempting to treat acute cases of cancer); and inability to diagnose properly because of a lack of basic anatomical and physiological knowledge (see British Medical Association 1993; Bùi 1999; Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000; WHO 1995; 2002b). And so, while these many efforts to regulate the practitioners of herbal medicine underline a relatively new acceptance that far from *all* herbalists are 'dangerous' to the public health, it remains just as clear that the problem of herbal 'quackery' is here to stay, with focus now directed at those unlicensed, unregistered, unqualified, untrained or even 'rogue' herbalists that either actively distance themselves from or are oblivious to governmental licensing systems and/ or the voluntary codes of practice advocated by representative organisations.

Herbal vigilance and awareness

The continued pervasiveness of herbal remedies in day-to-day household medical practices in Vietnam was highlighted in a survey by the Institute of Traditional Medicine from 1999, according to which 85.2% of respondents could name and describe the medicinal use of at least ten plants (Huu and Borton 2003: 91), an inclination corroborated by Craig (2002: 107) who reported that mothers of the 60 families he interviewed recalled having used an average of 11.1 herbal remedies in the past year. While not nearly as prevalent in the United Kingdom,[60] the volume of over-the-counter sales of herbal medicines[61] does suggest that people are in many cases diagnosing and medicating themselves without first seeking the advice of either a herbalist or a doctor. Whatever the exact numbers of herbalist consultations or sales of herbal medicinal products are, it is certainly clear that herbal medicine is not a practice that is in any way limited to registered and licensed practitioners.

[60] In a 1999 BBC survey, 20% of respondents claimed to have used some form of CAM in the past 12 months – the most popular form being herbal medicine which 34% of the 20% had used (Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000: 1.17).

[61] In the UK alone, it is estimated that the market for herbal medicines is up to £240 million per annum, which includes retail, internet, direct and mail order sales (Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000: 5.86). Figures for the Vietnamese herbal market are harder to come by, but it has been estimated to generate some US$ 20 million in export revenues, and the government has recently set a target of 30% of the domestic pharmaceutical market for traditional medicinal products (Vietnam. Ministry of Health. 2003). These figures, however, relate to industrialised herbal medicines, and do not take into account the prevalent cultivation and use of herbal starting materials by individual households.

Rather it plays a significant part in commonsense, day-to-day care of the self in both countries, a point I will be returning to at length in chapter 7.

At any rate, self-medication or public use is an aspect of herbal medicine that has definitely not been overlooked in recent regulatory initiatives, as the consumers of herbal medicinal products have become the target of information and awareness campaigns on the "appropriate" use of herbal medicines and, in the case of Vietnam, also programmes to encourage the growth and use of medicinal plants as a cost-effective means of treatment – programmes that, in the words of the WHO, "promote the proper use of TM/CAM through consumer education/training" (2004a: x). In the United Kingdom, the normalisation of herbal medicine use by consumers is primarily seen as a task of awareness raising that ultimately assists users in making "informed choices" about the healthcare products they use. The internet, media and popular literature are all mediums through which the proper use of herbal medicine is being advocated. For example, the Medicines and Healthcare products Regulatory Agency (MHRA) recently launched a Herbal Safety News website to "help widen awareness of the safety issues sometimes raised by the use of herbal remedies, and in doing so, help to protect public health" (Great Britain. Medicines and Healthcare products Regulatory Agency. 2004b). The site provides general advice to consumers on the use of herbal medicine, urging them to be cautious towards both products and practitioners, as well as providing up to date information on the latest safety concerns and product recalls. There are plenty of other internet sites providing similar kinds of safety alerts, ranging from Herbal Watch, Quackwatch, DietFraud, PhytoNet, to the European Medicines Agency's Product Safety Announcements. What is being advocated in these sites is a kind of herbal pharmacovigilance on the part of consumers, encouraging them to be wary of "100% natural!" claims, as well as of the exaggerated efficacy claims which it is suggested are especially rampant in spam e-mail advertisements and online 'pharmacies'. These sites include procedures for the reporting of adverse effects such that this information can be shared with as many interested users as possible.

Yet, it is not only the regulators and the consumer watchdogs who are encouraging and advocating responsible use of herbal medicines. The NIMH has also been active in urging cautious and vigilant use of herbal medicines, as outlined in a 2002 BBC interview by then President Trudy Norris:

> What we are concerned about is that lots of people self-prescribe in an inappropriate way… We are not against commercial herbal remedies bought for self-medication, but urge people to find out as much as possible before self-prescribing. In the market place matters of health and illness can create vulnerability. The practitioner's main focus is the actual health needs of the patients over and above any consideration of profit. This can not always be said of the entire supplement market. (BBC News Online 2002)

Since then, an annual Herbal Medicine Awareness Week has been organised, a Herbal Health Advice Line has been opened to allow members of the public to get in touch with a local herbalist for expert advice, local walks with qualified herbalists to learn about the properties of medicinal plants growing in the UK have been organised, and a revised edition of the booklet Making Sense of Herbal Remedies has been published advising consumers to choose their products carefully and to always seek advice from a qualified herbalist when in doubt (NIMH 2004a; Norris 2004).

One of the more contentious issues stemming from awareness campaigns on the proper use of herbal medicines has been that of the role of the General Practitioner. While there are some who do view and use herbal medicine as a complete alternative to those services he or she would otherwise receive through the National Health Services, surveys have suggested that most people use herbal medicine in a complementary fashion, but are reluctant to inform their GPs that they are using herbal medicines for fear of ridicule or because they view it as a private matter (Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000). However, following a number of reports of harmful herb-pharmaceutical interactions, consumers are now being advised "to tell your doctor or pharmacist if you are taking a herbal remedy with other medicines such as prescribed medicines" (Great Britain. Medicines and Healthcare products Regulatory Agency. 2004b). At the same time, the wisdom of using herbal medicine as a complete alternative to conventional treatment has also been questioned by health authorities. As we saw in the previous section, recognising and advertising the limits of their competence was a crucial component of the responsibilisation of herbal practitioners, and this message is also being conveyed to herbal medicine users: "Anyone who has previously experienced any liver complaint, or any other serious health complaint is advised not to take any herbal remedy without speaking to their doctor first" (Great Britain. Medicines and Healthcare products Regulatory Agency. 2004b). Also the NIMH points out that "[q]ualified herbalists know when a condition is best seen by a doctor or another therapist" (NIMH 2004b).

And so, in the United Kingdom, normalising public use of herbal medicine has been very much about "enabl[ing] them to make appropriate decisions on how to improve their health" by making sure that they are "better informed and aware" (WHO 2004a: vi). In Vietnam, on the other hand, where the vast majority of people are self-medicating with herbs and the government's strategy has been to actively mobilise traditional medicine as a means of promoting more than protecting public health, official policy has been to encourage the growth and use of herbal medicinal plants as a cost-effective way of treating some of the country's most common ailments. One would perhaps assume that since Vietnam has had such a long history of herbal medicine use, its promotion has never been a problem. This is far from being the case, as both the extent and forms of use of traditional herbal medicines have been the object of a number of programmes and campaigns since the battle of Dien Bien Phu in May 1954. The period might be roughly divided into three parts with the first three decades up to 1985 characterised by a chronic shortage of modern medicinal supplies as a direct result of trade embargos against Vietnam, as well as conflict. As a way to overcome this shortage, the Vietnamese government launched a "revolutionary movement to bring traditional medicine back to the grassroots level" (Hoàng 2004), especially since colonial policies had done so much to discourage the use of traditional medicine. Indeed, as Thompson (2004) has shown, traditional medicine and its practitioners played an important role in the building up of a nationalist movement together with western-trained physicians in the first half of the 20th century, and as a result they participated actively in the Viet Minh's campaign against French soldiers (1945-54).

Following formal inauguration in 1957, the Institute of Traditional Medicine continued this strategy of mobilising traditional medicine at the grassroots level, by organising a number of training courses aimed at mobilising and training some 2,000 activists who were to return to their districts as focal persons for the promotion of traditional medicine, initially in North Vietnam. The Institute also nominated groups of three to four persons who were then sent out to a number of villages to work with medical staff in the area on ways to promote traditional medicine. As described by Minister of Health Pham Ngoc Thach in 1965: "We promote the cultivation of medicinal plants, not only on an industrial scale but also by individual families. We encourage each family, particularly in the countryside, to grow in a corner of its garden a few plants for the treatment of common diseases (headache, diarrhoea, etc.) and plants with antibiotic properties" (Pham 1965: 13).

As armed conflict broke out against American forces in 1965, traditional therapies and herbal remedies would again play a decisive role in Vietnam's so-called 'second war of independence' which was fought out in the dense jungles of central Vietnam. In the face of critical shortages of modern medical supplies, traditional remedies were used to treat burns, war wounds and tropical disease (Hoàng, et al. 1999: 27). Bearing this in mind, it must surely stand as one of the great ironies of Vietnam's tragic postcolonial history that just as modern medicine had been used as a 'civilising weapon' against what were considered ignorant and superstitious natives by Vietnam's colonisers, modernising and repopularising traditional medicine in Vietnam became a crucial element of their own grassroots-based efforts to drive these very colonisers out. As we will see in chapter 7, it is no coincidence that traditional medicine played such a central role in the building up and promoting of a *Vietnamese* national identity throughout the 20th century.

Following the reunification of Vietnam in 1976, the government's efforts to encourage use of traditional medicine were expanded to the rest of the country, with the Ministry of Health issuing a decree requiring every district to have a department or institute that provided traditional medical treatment. It is estimated that 40-50% of all medical treatment being provided at the time was based on traditional medicine, with herbal medicine and acupuncture being the most popular therapies (Hoàng 2004; Huu and Borton 2003). However, when the Vietnamese government embarked on a series of economic reforms starting in 1986 it had a marked impact on the provision and practice of traditional medicine with "many herbal pharmacists and acupuncturists abandon[ing] their practices" (Huu and Borton 2003: 87), mainly because the subsidies they had been receiving from health authorities were rescinded. At the same time, modern drugs were becoming more freely available with trade embargos gradually being lifted. As a result, traditional medicine experienced a period of decline that lasted until about 1992.

Since then, however, the Ministry of Health has led an active campaign to "revitalise" or "revive" traditional medicine (this being the third and final part of the post-independence period). Important components of this "revival" campaign have been the "Drugs at Home" and "Doctor at Home" programmes of the Ministry of Health (see World Bank 1993). Picking up where they had left off, the "Drugs at Home" programme was designed to once again encourage communal clinics as well as villagers to grow thirty-five species of

essential medicinal plants in their gardens known for their anti-influenza, anti-inflammatory, anti-dysenteric, anti-rheumatic, anti-tussive, anti-diarrhoeic and emmenagogic properties.[62] Each commune is now encouraged to reserve more than half a hectare for such cultivation; the goal is to have about 40% of patients treated with herbal remedies at communal clinics (Bùi 1999: 30-31). As part of the "Doctor at Home" programme, a book entitled "Herbal Medicines for Families" has been prepared providing users with instructions on how to prepare remedies for some of their most common ailments, including diarrhoea, whooping cough, allergies, hormonal imbalance and colitis (see Bùi 1999; World Bank 1993). This renewed revitalization effort, spearheaded by the Ministry of Health and involving a number of trained activists, has been described as a programme to "re-educate the local people on the use of herbal remedies and [to] encourage them to grow and use medicinal plants" (Huu and Borton 2003: 67).

And so, while the aim of normalisation efforts in the United Kingdom (where scepticism as to the efficacy of herbal medicine is still widespread) has been one of instilling and cultivating a kind of herbal pharmacovigilance in consumers of herbal medicines, in Vietnam (where the efficacy of herbal medicines is more or less taken for granted and they are used pretty much universally) it has much more been about "re-educating" the people about the virtues of herbal medicine as a means of instilling a self-sufficient approach to looking after their own health, among other things by cultivating essential medicinal plants in their own gardens. The extent of self-medication with herbal medicines is both recognised, and in the case of Vietnam, encouraged albeit with the relatively new caveat that this self-use be "appropriate". That is to say, public use of herbal medicine is to be promoted insofar as it contributes to the overall promotion of health and well-being. Moreover, as consumers are increasingly encouraged to take an active part in ensuring their own health, the proper use of herbal medicine through "informed choice" now stands as one option among many others. Such proper use is, however, not to be taken for granted, but is rather encouraged through a range of awareness raising and educational efforts that aim to responsibilise and/or activate users of herbal medicines.[63]

[62] These essential medicinal plants had been identified during the course of the various botanising missions carried out by scientists and herbalists described earlier.
[63] See chapter 7 for further discussion on how herbal medicine use has been intervened upon in recent decades.

Conclusion

As already forewarned, for all its discussion of regulatory initiatives, governmental herbal medicine policies, consumer awareness programmes and herbal practitioner association activities, this chapter cannot be said to have provided an exhaustive or representative history of the regulation of herbal medicine in Vietnam and the UK. Nor has my intention been to evaluate the benefits or disadvantages associated with different regulatory regimes, as has perhaps otherwise been customary in policy-oriented research. Instead, what I have done in this chapter is trace the emerging contours of the contemporary *problem* of herbal medicine in the Vietnamese and UK contexts over the past decades, showing where differences and overlaps have appeared. Rather than approach the field of herbal medicine in terms of marginalisation or coercion, I have chosen to analyse it as a field of problematisation that has opened up debates about who should be allowed to practice herbal medicine, what herbal products should be allowed on to the market, and what patients should do to get the best and safest possible herbal treatment.

These problematisations have in turn both relied on and made available a host of new possibilities for action, where producers, practitioners and users are concerned. Herbal practitioners are to be competent, responsible and accountable, which requires: adhering to new codes of conduct; attendance to lifelong learning; refraining from 'quacking' one's wares and abilities; maintenance of skills; registration with local health authorities or practitioner associations; utilisation of quality-controlled herbal remedies; and recognition of the limitations of one's healing abilities. Producers of herbal medicinal products are to follow Good Manufacturing Principles; ensure that they have a sustainable, pesticide-free supply of fresh herbs; and refrain from lacing their products with any 'foreign' substances. And, on their part, herbal medicine users/patients are to act responsibly and vigilantly by making informed choices about the products and practitioners they choose; they should report any false or misleading claims that might be made; in the United Kingdom, they should preferably consult with their GPs before taking any herbal medicines; and in Vietnam, they are to take an active part in growing and harvesting essential herbal medicinal plants, and to learn how to prepare home remedies for common ailments.

In sum, promoting and protecting the public health in the field of herbal medicine today requires "appropriate", "informed" and "safe" use of it by active, vigilant and responsible subjects that are enabled to tell the competent from the incompetent herbal practitioner and

protected from counterfeit or contaminated herbal remedies. It requires the "responsible" and "ethical" practice of herbal medicine by "qualified" practitioners, who adhere to strict codes of conduct and commitments to continued professional development. What is more, a whole industry is emerging around the *practices of assurance* that are increasingly demanded of the manufacturers and practitioners of herbal medicines – involving quality controls, clinical trials, training programmes, refresher courses and codes of conduct. The key debates in herbal medicine today are not over whether it should be regulated and controlled (as opposed to marginalised or banned), but rather over how such practices of assurance should be organised so as best to preserve the 'real value' of herbal medicine while at the same time protecting the public from dangerous practitioners and products. Some argue that the kind of regulatory efforts I have been describing in this chapter may in fact end up disenchanting, ossifying or diluting herbal medicine,[64] while others are convinced that they have improved its quality, safety and efficacy, a debate we will be returning to throughout the following chapters. For now it is important to understand that the transformation of herbal medicine, from fringe to alternative in the UK and from primitive to traditional in Vietnam, has opened up a new field of problematisation in terms of competency, safety and responsibility which is already being played out through a number of concrete strategies of normalisation. This is what I have called a bio-politicisation of herbal medicine as the objective has been to devise ways of ensuring that herbal medicine – its production, practice and use – promotes rather than harms the health of populations and individuals in both countries. Let us now turn our attention to a concept that I have yet to deal with at length, namely efficacy.

[64] For example, herbalist Peter Jackson-Main argues that: "By defining herbal medicine as a graduate entry profession, there is a danger that the emphasis on academic learning may eclipse traditional values and practices. The introduction and consolidation of herbal medicine in universities is a vital step in the fight for recognition, and a coming of age of Western herbal medicine. At the same time, it echoes the process of exclusive professionalisation that characterised the medical profession's assault on the lay community of practitioners in the nineteenth century" (2005: 97). Saks makes a similar point suggesting that one of the dangers of professionalisation is "the way in which such enclaves of exclusionary social closure can become pockets of self-interested protectionism that retard progress, despite the positive ideologies of professional bodies" (2003: 152).

5 Above and beyond superstition

In the early part of the 1980s, Tran Khuong Đàn set off northward from Ho Chi Minh City on a journey that would take him the length of Vietnam's 2,000 or so kilometres. Trained as a traditional herbalist by his father, Đàn's travels were to be of a medically edifying nature. For after having witnessed the miserable effects opium addiction was having on individuals and communities first hand in his own neighbourhood, Tran Khuong Đàn became determined to find a remedy that could help rid opium-dependent users of their addiction. And very much in tune with national efforts to revive traditional medicine, Đàn felt that the experiences and knowledge that traditional herbalists throughout the country had had with opium dependency was a good place to start. His travels would therefore take him off the beaten track, to rural communes and villages where opium cultivation and use had been a part of daily life for centuries. In these villages, Đàn sought out traditional herbalists to discuss and exchange ideas on treating opium dependency, only to discover that in most cases local herbal remedies included some quantity of opium aimed at appeasing withdrawal symptoms.

Having reached the north of Vietnam towards the end of the 1980s, Đàn settled down to digest and organise the experiences and knowledge he had amassed during his travels. He also began scouring traditional Chinese and modern medical texts to learn as much as he could about addiction as well as methods of treatment. It was from this broad base of knowledge, spanning the traditional practices of village herbalists and the theoretical underpinnings of Sino-Vietnamese traditional medicine, that Đàn began developing a herbal remedy for addiction. His aim was to home in on a range of plants that could address what he had come to see as the key problems of addiction: an imbalance in the bodies of the addicts, a continuous shortage of drugs in the brain, and a set of sixteen different withdrawal symptoms that made 'cold turkey' detoxification a nightmare. From Sino-Vietnamese theories of healing, Đàn knew that addiction could be understood in terms of a Yin-Yang imbalance with addicts suffering from extreme Yin. At the same time, from his own observations in Ho Chi Minh City and during his travels, Đàn had become convinced that each of the sixteen withdrawal symptoms that manifest themselves during the first 72 hours of detoxification had to be understood and medicinally addressed in their specificities, albeit as complementary parts of a holistic treatment. This conviction was

further corroborated by two years of successive self-inflicted addiction withdrawals, during which Đàn self-experimented with various herbs and mixtures.[65]

And so finally, in September 1990, Tran Khuong Đàn approached local health authorities with a complex thirteen-plant herbal syrup, which he was convinced could cure addicts of their addiction by appeasing withdrawal symptoms, restoring balance and, importantly, eliminating cravings. Only a few months later, a memorandum from Minister of Health Pham Song was sent to Prime Minister Do Muoi to inform him that "the Ministry of Health has received a request for a license to manufacture and distribute the medication TKD [later renamed Heantos]… It has been determined that this medication for the cure of drug addiction has an important potential for the social economy and thus the Ministry of Health has granted a license to proceed with trials" (Vietnam. Ministry of Health. 1991). Six years later, in 1996, Đàn joined forces with the Institute of Chemistry in Hanoi to further develop his remedy, arguing:

> while traditional medicine was developed over thousands of years, certain aspects still need to be explained scientifically. And so, it tends to be regarded as superstition. Using science to throw light on traditional medicine is imperative. (cited in Impact 2000)

Unbeknownst to Tran Khuong Đàn, during the same decade that Heantos was being developed in Vietnam, a plant long known for its medicinal value in Europe was about to be 'rediscovered', kicking off a chain of events that would eventually turn St. John's Wort (*hypericum perforatum*) into one of the first herbal blockbusters. Records of the medicinal uses of St. John's Wort date back to Theophrastus (373-287 BC), Pliny (23-79 AD) and Dioscordes (40-90 AD) who recommended it for burns, snakebites and as a diuretic. But it was not until the 16th century that the first references to its use as an "arnica for the nerves" can be found, when Paracelsus (1493-1541) recommended it for not just wounds and parasites, but also for what he called 'phantasmata' (see Müller 2005). A century later, in 1630, Italian iatrochemist Angelo Sala reported that:

> St. John's Wort has a curious, excellent reputation for the treatment of illnesses of the imagination… and for the treatment of melancholia, anxiety

[65] This is how Tran Khuong Đàn has recounted the story of how he developed Heantos on numerous occasions, see for example, Impact (2000) or the 24 November 1997 issue of *Time* magazine (Larimer 1997).

> and disturbances of understanding… With the same power it works against the symptoms caused by witches. (cited in Rosenthal 1998: 197)

During the so-called 'golden age of quackery' of the 17th to 19th centuries (Holbrook 1959; Porter 1989), the effectiveness of St. John's Wort in treating "illnesses of the imagination" was accounted for in a few different ways. Ascribing to astrological explanations as well as to the doctrine of signatures, Nicholas Culpeper classed the very yellow-flowering St. John's Wort "under the celestial sign Leo, and the dominion of the Sun" in his *English Physitian* (1652), while Robert John Thornton explained in his *Family Herbal* (1814) how "formerly it was supposed, and not without reason, that madmen were possessed of the devil, and this plant was found so successful in that disorder, that it had the title *Fuga daemonum*, as curing demoniacs" (cited in Rosenthal 1998: 202). Indeed, Rosenthal has shown how accounts of the powers of St. John's Wort to ward off spirits, chase away the devil, or overcome witchcraft were "rampant throughout Europe and the British Isles" during these centuries (1998: 203). But it would not be long before, as we saw in previous chapters, such explanations would come to be dismissed as the superstitions and old wives' tales of backward rural populations, which probably also explains the relative medicinal anonymity of St. John's Wort during the ensuing 'golden age of biomedicine'. In fact, it would not reappear until the early 1980s,[66] when a small manufacturer of herbal remedies, Lichtwer Pharma, commissioned a series of clinical trials to test the efficacy of St. John's Wort extract in the treatment of an emerging epidemic of fast-paced modern life: depression.

This chapter is about the concept of efficacy. What does it entail to claim that an alternative or traditional remedy is efficacious? What kinds of claims to truth are invoked in doing so? And crucially, how does one go about validating efficacy claims? In the following, we will take a closer look at some of the conditions which have allowed for Heantos and St. John's Wort to rank among the most prominent herbal remedies in Vietnam and the United Kingdom in recent years. Importantly, as we will see, this has relied on an active effort to dismiss suggestions that these remedies are just another set of backward, superstitious concoctions, or to put it in more updated terms, that they have a therapeutic effect that is above and beyond placebo. In both cases, confirming clinical efficacy has taken priority

[66] Dr. K. Daniel of Germany did carry out the first controlled trials on patients suffering from mild depression in the late 1930s, but his research appears to have become lost as war broke out in Europe (see Rosenthal 1998: 200-2).

over determining the exact (biological) mechanism of action that might be responsible for this effect, although as we will be seeing in the following chapter, this latter work has also begun in earnest. Yet, while randomised controlled trials have played a crucial role in attempts to validate the specific (biological) verum effects (what might be termed the bio-efficacy) of Heantos and St. John's Wort, I will argue that by virtue of their status as traditional and alternative remedies, confirming clinical efficacy has been in part facilitated by an early 20th century anthropological recasting of evolutionarily 'primitive' and 'immature' medical practices into highly rational, sophisticated and coherent systems of healing.

As such, there are three particular conceptual recasts, that I will be describing in this chapter and which I will demonstrate have been instrumental in the framing of recent efforts to validate the efficacy of Heantos and St. John's Wort. The first relates to 20th century ethnographic accounts of how 'symbolic cognitive frameworks' – which these two herbal remedies and the healing systems they invoke are certainly seen to provide patients with – are crucial in helping people *cope* with their diseases/illnesses. By showing how what were once considered the immature superstitions of easily suggestible and backward rural populations – whether in Vietnam or the United Kingdom – were recast into coherent cognitive frameworks, I will argue that pioneer medical anthropology studies have been instrumental in positing a very concrete *symbolic efficacy* for all therapies, remedies and healing encounters, regardless of whether they are considered primitive, modern, traditional or alternative. Through an archaeological analysis of some of the classic medical anthropology studies by Rivers, Ackerknecht, Evans-Pritchard, Levi-Strauss and Turner, I will suggest that the mechanism of action of this posited symbolic efficacy can be understood in terms of what anthropologist Arthur Kleinman has summarised as all those "symbolic pathway[s] of words, feelings, values, expectations, beliefs, and the like" (1973: 210), which facilitate the redressive restoration of cognitive order in patients, generate hope and provide patients with practical and cognitive means with which to come to terms with their conditions, thus enabling them to cope with the anxiety, stress and chaos of disease. To this day, illness narratives, experiences and behaviour in the context of coping strategies remain key objects of both anthropological and sociological studies of medicine, especially so in the field of the sociology of TM and CAM.

The second conceptual recast I will describe relates to the infamous placebo effect. Much has been written and said of the placebo effect in recent years, not least as a 'plausible' explanation for any positive effects TMCAM therapies and remedies might be having on patients. What I will show is how the above-mentioned medical anthropology studies also played a pivotal role in making space for what I argue has been a kind of *decriminalising of placebo* in recent decades. Just as has been the case with symbolic efficacy, placebo efficacy,[67] it is increasingly argued, accounts for a significant share of the overall therapeutic efficacy of all medicines and therapies and the role of medical anthropology in suggesting this clinical reality is an important but overlooked part of social studies of the placebo effect.[68] By showing how medical anthropologists have accounted for the persistence of seemingly "outdated" medical practices well into the 20th century, I will argue that the notion of placebo efficacy has been used to provide a vital link between a cognitive realm of symbolic efficacy and a corporeal realm of bio-efficacy, via what have been termed "intermediate pathways" that "connect cultural events and forms with affective and physiological processes" (Brody 1997: 80; Kleinman 1973: 210). That is to say, a non-fraudulent placebo effect can be understood as a kind of inverted psychosomatic disorder – a concrete, symbolically-incited (whether accounted for in behaviouristic, linguistic, cognitive or psychotherapeutic terms) 'spill-over effect' into an equally concrete somatic domain of bio-pathway facilitated efficacy.

Finally, the third conceptual recast I will describe relates to the biological/physiological specificities of herbal medicine. As already mentioned, the pressures to demonstrate an efficacy that is 'above and beyond placebo' are increasing by the day, perhaps even more so in the field of TMCAM, which historically has been particularly associated with superstition, delusion and trickery (cf. Kaptchuk 1998a; Ruggie 2004). By presenting a genealogical analysis of the practices that make up the protocols, experiments, standardised

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[67] Kienle and Kiene (1997: 1317) have made the important conceptual argument that the term 'psychosomatic efficacy' might be more appropriate since "many factors and phenomena [e.g. natural course of disease, polite answers from patients, anxiety relief] have been summed up under the terms 'placebo' and 'placebo effect' without being *placebos* or *effects* of placebo administrations". It is an important point since the classic description of a placebo as a "pharmacologically inert substance" was based on the authentic-looking bread and sugar pills, while today the deployment of the concept of placebo – or sham treatment – takes place in a much wider arena of therapies, from sham surgery to sham acupuncture, with all the related debates about whether such placebos are plausible at all.

[68] For example, in an interdisciplinary anthology on the placebo effect historian of science Anne Harrington suggested that it was only from the 1980s that medical anthropologists began arguing for a role for symbols in the healing process (Harrington 1997: 7). I will show how the anthropological legacy goes back much further than this.

outcome measures, and final results of the many clinical efficacy trials that both St. John's Wort and Heantos have been subject to in the past two decades, I will show how in both cases there has been a particular emphasis on demonstrating that there is more to these two remedies than symbolic and placebo efficacy, that they have an efficacy that is above and beyond the superstitions of old days. A crucial part of the ongoing processes to establish the worth of these two herbal remedies has been attempts to demonstrate that they have a very specific, verum medicine-induced bio-efficacy in the treatment of depression and addiction respectively. Most importantly, while symbolic and placebo efficacy are considered to be significant components of the overall therapeutic efficacy of all medicines, therapies and healing encounters, I will show how establishing (preferably via double-blind randomised controlled trials) that a remedy has a bio-efficacy that is above and beyond the bio-efficacy that otherwise demonstrably results from 'spill-over' placebo or psychosomatic effects has been set as a milestone *threshold of efficacy* for both Heantos and St. John's Wort which 'once and for all' can eliminate any suggestions that these are based on nothing but backwards superstitions, suggestion or placebo. Ironically enough, as we will see, establishing an efficacy that is above and beyond placebo in these two particular cases nevertheless has relied on the utilisation of standardised clinical outcome measures that are calculated from not just observable physiological indicators but just as importantly from elicited 'subjective' treatment experience accounts of individual trial participants. Moreover, these standardised clinical outcome measures, or templates of healing (cf. Triantafillou and Moreira 2005), are fast becoming points of contention in themselves as to their 'appropriateness' and 'adequacy' in measuring the efficacy of a treatment or remedy.

Decriminalising placebo – leechcraft and the symbolic therapeutics of coping

As Kaptchuk (1998a) has shown, during the 'golden age of quackery', where bad medicine was particularly associated with hucksters and cranks accused of deliberately pretending spectacular claims for their snake oils and miracle cures, blind assessment of a treatment emerged as a tool specifically designed for detecting fraud. These quacks were out to scam the public and by way of ingeniously designed blind trials, their game could be exposed. The appointment of a royal commission by King Louis XVI of France in 1784 to investigate the effects of animal magnetism claimed by Franz Anton Mesmer and his followers is often cited as a significant moment in the emergence of a new way to determine the purported efficacy of a treatment or remedy – that is, by comparing its effects

with that of a sham treatment made practicable by blind-folding prospective treatment recipients and observing how they react to both verum and sham treatments (see Harrington 1997; 2006; Kaptchuk 1998a). Importantly, in the final report of King Louis XVI's royal commission, who had carried out a series of blind-folded trials on a number of subjects, Benjamin Franklin and his team of scientists concluded that any "sensations, real or pretended, were determined by the imagination" (cited in Darnton 1968: 62-5). Ever since, a role for the imagination, mind and later brain in generating therapeutic cures for what came to be considered essentially biophysical diseases, has been scientifically posited and vigorously studied.

Even as a number of psychologists picked up on the role of "suggestion" in the eliciting of therapeutic effects towards the end of the 19th century, the contention remained that whatever the observed effects in patients these were deceptions, 'tricks of the mind', or even cases of conscious fraud on the part of a practitioner. It would not be until the early 20th century that this vilification of the imagination as a deceiving healing agent would begin its gradual transformation into a recognised and acknowledged therapeutic agent of all forms of treatment and medicine (see Harrington 2006), eventually canonised as the 'placebo effect' in 1950 when pharmacologist Stewart Wolf of Cornell University Medical College concluded that "'placebo effects' which modify the pharmacologic action of drugs or endow inert agents with potency are *not* imaginary, but may be associated with measurable changes at the end organs" (Wolf 1950: 108, my emphasis). While historical studies of the placebo effect have done well to highlight the important role played by especially psychologists, neurologists and pharmacologists in the post-WWII emergence of the placebo effect as a legitimate object of scientific inquiry, the pivotal role of early medical anthropology in the conceptual recasting that has taken the sham out of placebo has been hitherto overlooked.

There is an interesting coincidence in the history of blind assessment in medicine and that of medical anthropology in the work of experimental psychologist and medical anthropologist W.H.R. Rivers. While at Cambridge University, Rivers carried out pioneer work in the use of "control mixtures which have usually been wholly indistinguishable from those containing active substances" (cited in Kaptchuk 1998a: 419) when testing psychological stimulants, and while doing fieldwork in Melanesia and New Guinea he came to describe "the part played by suggestion in the production and cure of diseases

among such people as the Papuans and Melanesians" (Rivers 1924: 50). Nineteenth century evolutionary classifications of peoples and races into gradated categories of savages, barbarians and civilised had assumed a linear development of languages, religions and customs from simple to complex, and as a result the first anthropological reports of the "primitive medicine" and "witchdoctors" of the 'savages' were mostly explained in terms of a child-like simplicity and immaturity which made them susceptible to irrational beliefs. The animistic religions, "monosyllabic" languages, "superstitious" healing rituals, and rudimentary tools of the savages were all taken as proofs of an immature people who were easily suggestible and rarely capable of "deep thought" (Lubbock 1875: 143). Consequently, 19th century civilisation taxonomies were dominated by metaphors of a child maturing into an adult, the argument being that child-like savages were mentally immature compared to the rational civilised who were considered the adults of humanity (see Wahlberg 2001; 2003). Classification systems which centred around such teleologies of maturation ranged from Morgan's (1877) three statuses of savagery, barbarism and civilisation, Comte's ([1830] 1974) primitive, metaphysical and positive states of intellectual speculation, and Spencer's gradated measurement and taxonomising of the mean capacities of aboriginal Australian, African, Malayan and English crania which he argued showed "an increase in the course of the advance from the savage state to our present phase of civilization" ([1852] 1972: 33).

But this evolutionary account of immature peoples and primitive medicine would undergo a drastic recasting with the advent of Malinowskian cultural immersion in the early part of the 20th century. Like Malinowski, Rivers had become convinced during his visits to Melanesia that Melanesians were in fact highly rational and sophisticated people, a point he would make emphatically in his medical anthropology classic *Medicine, Magic, Religion*: "the concepts underlying the magical procedure of savage man have not the vague and indefinite character often assigned to them, but form clear and relatively concrete motives for the complex procedures of the sorcerer and leech" and conversely, "the practices of these peoples in relation to disease are not a medley of disconnected and meaningless customs, but are inspired by definite ideas concerning the causation of disease" (1924: 52, 51). As a consequence, Rivers consistently used the term *leechcraft* in place of the more evolutionarily-loaded *primitive medicine* when referring to the healing arts of the so-called "peoples of rude culture".

A few decades later, Ackerknecht went on to summarise this conceptual recast by arguing that, "[in the past,] students either decided that certain primitives have no medicine at all, because their medicine fits so badly into our pattern of medicine, or they regarded it only as a mere immature or degenerate variety of our medicine… [But,] primitive medicine is not a queer collection of errors and superstitions, but a number of living units in living cultural patterns, quite able to function through the centuries in spite of their fundamental differences from our own pattern" (Ackerknecht 1971: 120). Even Evans-Pritchard, who suggested in his 1937 ethnography of *Witchcraft, Oracles and Magic Among the Azande* of southern Sudan that it could well be that "the majority of [Zande witchdoctors] are quacks", did not account for their continuing prevalence by suggesting an irrationality or simplicity on the part of the Azande[69]:

> Azande do not consider what their world would be like without witch-doctors any more than we consider what it would be like without physicians. Since there is witchcraft there are naturally witch-doctors… All their beliefs hang together, and were a Zande to give up faith in witch-doctorhood he would have to surrender equally his belief in witchcraft and oracles.… In this web of belief every strand depends upon every other strand, and a Zande cannot get out of its meshes because this is the only world he knows. The web is not an external structure in which he is enclosed. It is the texture of his thought and he cannot think that his thought is wrong. Nevertheless, his beliefs are not absolutely set but are variable and fluctuating to allow for different situations and to permit empirical observation and even doubts. (Evans-Pritchard 1937: 185, 194-5)

The increasing number of ethnographically detailed accounts of the medical practices of 'primitive peoples' that emerged during the first half of the 20th century were more or less unified in their conclusion that "in the department of his activity in which he endeavours to cope with disease, savage man is no illogical or prelogical creature, … his actions are guided by reasoning as definite as that we can claim for our own medical practices" (Rivers 1924: 53). But this still left anthropologists with the question of just how the leechcraft of the savages could work, as this, Ackerknecht argued, it quite dramatically did: "There are too many well testified cases in primitive tribes where magic kills by suggestion for the fact to be doubted. Why should the power that kills not be able to heal?" (Ackerknecht 1971: 130). It was common knowledge at the time that herbs and plants have been an important source of medicines for peoples and cultures throughout the world since time immemorial.

[69] Indeed, Evans-Pritchard made a point of underlining that it was his Zande informants themselves who had pointed out the 'trickery' of many of their witchdoctors to him, but also that there were "a few entirely reliable practitioners" (1937: 185).

But Evans-Pritchard for one was definitely not convinced that the efficacy of Azande healing could be attributed to the pharmacological properties of the plants used by their witchdoctors and healers:

> The assumption that Azande would hardly have continued to use drugs for centuries if they possessed no curative properties… is unhappily contradicted by the history of European medicine and by the history of magic everywhere and at all times. The enormous number of drugs which Azande employ and the variety of herbal products they bring to bear on a single disease at once demonstrate their lack of therapeutic value when we reflect what scientific pharmacology really implies. (Evans-Pritchard 1937: 494)

Not everyone was in full agreement with Evans-Pritchard on this point however, as, for example, Ackerknecht argued that "an enormous number of effective drugs is known to the primitives. From twenty-five to fifty percent of their pharmacopoeia is often found to be objectively active" (1971: 128). Nevertheless, there was broad agreement in anthropological debates that the efficacy of leechcraft could not be accounted for by the medicinal plants used in healing practices alone.

Instead, medical anthropologists began building up a *theory of symbolic efficacy* to account for the healing effects of leechcraft. The concept of 'coping' has been and indeed remains central to this objectifying work. It was Rivers who initially suggested that the leechcraft of 'savages' should be understood in terms of their "endeavours to cope with disease", and that among the Papuans and Melanesians:

> we can see clearly that most of the processes by which disease was thought to be produced and was treated are such as would act through the mind. The manifold lines of treatment by which human or spiritual agents were induced to cure disease acted, if they were successful, through the agency of faith and suggestion. (Rivers 1924: 122)

Importantly, he did not view these processes as necessarily fraudulent, but argued instead that "there is reason to believe that [the sorcerer or priest] is not wholly a deceiver, but in some measure shares the general belief in his own powers… I believe that, in many cases, it is the same among ourselves, and that a study of our own quacks and charlatans, with that amount of care which we devote to the Australian or the Melanesian leech, would show us the impostor far less than is usually supposed" (Rivers 1924: 50-1).

So how did faith and suggestion work in the leeches' endeavours to assist their patients to cope with their diseases, and thereby to elicit cures? This was a central question for Ackerknecht, Levi-Strauss and Turner. From their work we can discern some of the forms of the many different pathways that are to this day seen to enable symbolic efficacy – that is to say, its mechanisms of action. "The primitive treatment centres around symbolical actions, for the symbol is of enormous importance in primitive thought," wrote Ackerknecht in a 1942 paper on the 'Problems of primitive medicine' (1971: 123). The primary function of the symbol, he and other anthropologists argued, was to make visible, concrete and material otherwise invisible forces, thereby making them amenable to manipulation and ultimately enabling cure. The *primitive symbol* is "concrete and material, and permits action by mystical participation upon invisible forces which it cannot attain otherwise", *primitive therapy* "is partly a process of making hidden and secret things visible and thereby accessible, if they are harmful, to redressive and remedial action" and the *primitive cure* consists "in making explicit a situation originally existing on the emotional level and in rendering acceptable to the mind pains which the body refuses to tolerate" (Ackerknecht 1971: 123-4; Lévi-Strauss 1968: 190; Turner 1967: 302-3).

There are in effect two key functions that have been posited for this process of using symbols to make explicit and concrete otherwise invisible, spiritual or emotional forces. The first, and most important, relates to the concept of coping. Disease, it is often argued, is a disruptive life event, one that engenders considerable disorder, chaos and anxiety in the patient.[70] The primary function of the witchdoctor's, priest's or sorcerer's healing ritual, according to medical anthropologists, was therefore to restore cognitive order – a kind of "bloodless, gutless" homeostasis to borrow Wilson's (2004) phrase – and thereby to calm the patient:

> The medicine man is a *soul doctor* and his fellow primitive whom we know as an emotionalist needs him badly… His rigid system, which ignores doubt, dispels fear, restores confidence and inspires hope. And as Charcot said: the best inspirer of hope is the best physician. (Ackerknecht 1971: 130, my emphasis)

[70] See Clements (1932) for a fascinating nosology of primitive disease concepts from all over the world, which he taxonomises under the five main 'families' of sorcery, breach of taboo, disease-object intrusion, spirit intrusion and soul loss.

Highlighting that a sorcerer's healing ritual would often consist not only of medicinal herbs or other material implements but also a myth or narrative to go along with them, Lévi-Strauss argued that "the technique of the narrative aims at recreating a real experience in which the myth merely shifts the protagonists" and therefore that "the efficacy of the cure would be jeopardized if, even before any results were to be expected, it failed to offer the sick woman a resolution, that is, a situation wherein all protagonists have resumed their places and returned to an order which is no longer threatened" (Lévi-Strauss 1968: 194, 197).

It is this process of restoring order that has been singled out as the key to coping and therefore to the mechanism of action of symbolic efficacy. Turner, who meticulously documented the symbols used in various rituals by the Ndembu of Zambia in *Forest of Symbols*, argues that "out of the randomness and incoherence of the environment, the *chimbuki* [ritual specialist] selects certain items and arrays them in a coherent structure in accordance with his sensitivity to Ndembu evaluations and symbolism and in accordance with his intention of curing a specific, culturally defined disease" (Turner 1967: 351). And in a classic analysis of a Cuna woman's birth ritual in a chapter on 'The effectiveness of symbols', Lévi-Strauss concludes:

> The tutelary spirits and malevolent spirits, the supernatural monsters and magical animals, are all part of a coherent system on which the native conception of the universe is founded. The sick woman accepts these mythical beings or, more accurately, she has never questioned their existence. What she does not accept are the incoherent and arbitrary pains, which are an alien element in her system but which the shaman, calling upon myth, will re-integrate within a whole where everything is meaningful. (Lévi-Strauss 1968: 197)

The second key function posited for such processes of symbolic restorations of cognitive order is as inciter of the spill-over 'placebo effect'. Notwithstanding the crucial role they attributed to symbolic restorations of order in healing processes in themselves, each of these authors was also fully aware that a question remained as to whether this effect that they were describing was 'merely' a sophisticated account of what had long been known as "suggestion". And there were two particular ways in which this question was tackled. First of all, they argued that the symbolic component of healing was by no means limited to the experiences of 'primitive peoples'. Both Ackerknecht and Turner underlined that "suggestion is one of the major implements of [both] the shaman and of the M.D.", "it must

be admitted that medicine in our culture relies to a certain extent on suggestion…, the general practitioner in British rural areas administered 'nasty' medicines, partly on account of their curative properties and partly to satisfy the patient that they were 'strong' enough to 'kill' the ailment" (Ackerknecht 1971: 161; Turner 1967: 315). Although, all things equal, both agreed with Rivers that there nevertheless were differences in the use of suggestion between primitive and modern medicine, but that these were "only differences in degree" (Ackerknecht 1971: 161). Nevertheless, a question remained over whether effected cures remained in a psychological realm of coping or whether they also spilled over into a corporeal realm, much as psychosomatic disorders were seen to move from the psychogenic (incited by anxiety, stress, fear or trauma) to the somatic (manifest as heart irregularities, digestive disorders, asthma or skin conditions) (cf. Wilson 2004).

Turner argues that, in any case, "the distinction between 'medicine' as 'drug' and as 'ritual symbol' is a very fine one, and it is not always possible to make it clearly. All things are felt to be charged with powers of various kinds, and it is the job both of the herbalist and of the ritual specialist to manipulate these for the benefit of society" (1967: 335). Nevertheless, in reflecting over how Ndembu rituals had withstood the test of time, he concludes that in all likelihood there is not too much in the way of physiological cure that can be attributed directly to Ndembu healing rituals, rather any physiological effects are attributable to spill-over placebo efficacy:

> One reason for their persistence lies, no doubt, in the very fact that they are part of a religious system which itself constitutes an explanation of the universe and guarantees norms and values on which orderly social arrangements rest… Another more practical reason would be that many diseases are self-curing; in the course of time, regardless of treatment they are given, many people recover from illness, but the recovery is attributed to the treatment. Then again, psychological considerations must play a part in the case of mild psychosomatic conditions and in milder cases of somatic illness. Such considerations would include the authoritative air of the doctor-herbalist, the purposive structure of the procedure, the 'shock treatment' aspect mentioned above, and the sense that something traditional is being done about a known and named condition. Here we have an instance of the well-known placebo effect, where medicine is given to humour rather than to cure the patient, but where improvement in health nevertheless results. (Turner 1967: 356)

Lévi-Strauss, on the other hand, is more adamant in arguing that "this term [psychological cure] will remain meaningless unless we can explain how specific psychological

representations are invoked to combat equally specific physiological disturbances", and that a healing ritual "constitutes a *psychological manipulation* of the sick organ, and it is precisely from this manipulation that a cure is expected" (1968: 191, 192), which suggests a definite physiological 'spill-over' effect. In more detailed terms:

> The shaman provides the sick woman with a *language*, by means of which unexpressed, and otherwise inexpressible, psychic states can be immediately expressed. And it is the transition to this verbal expression – at the same time making it possible to undergo in an ordered and intelligible form a real experience that would otherwise be chaotic and inexpressible – which induces the *release* of the physiological process, that is, the reorganization, in a favourable direction, of the process to which the sick woman is subjected. (Lévi-Strauss 1968: 198, my emphasis)

In other words, just as psychogenic fear, trauma, anxiety or stress have been claimed to be generative of somatic disorders or even of 'voodoo death' via some kind of intermediate pathways, medical anthropologists have persistently argued that psychogenically induced hope, order, expectation or familiarity can be generative of somatic cure via similar, albeit reversed, pathways of psychosomatic mediation.

To sum up, we should not overlook the important role that medical anthropology has had in positing a very real and concrete symbolic efficacy for all therapeutic encounters, irrespective of whether they have been classed as primitive, traditional, modern or alternative. Moreover, the anthropological recasting of an irrational, simple or superstitious 'primitive medicine' into a very rational and complex 'leechcraft' has also played a key role in the relatively recent decriminalisation of placebo, by arguing for the possibility of a physiologically measurable spill-over placebo efficacy released by a real and concrete symbolic efficacy. If this symbolic efficacy is as real and concrete as they claim, then no longer is the resulting placebo efficacy *necessarily* a case of deceptive suggestion or conscious fraud. Rather, according to medical anthropologists, the redressive restoration of cognitive order and hope in the face of the incoherence, randomness and chaos of disease – the mechanism of action of coping understood as a kind of symbolic homeostasis – is a crucial, rational and material part of any healing process. To be sure, an unfinished and lively debate, not to mention scientific research project, remains over the extent to which, as well as over the specific ways in which, this symbolic efficacy spills over via intermediate pathways into a physiological realm of bio-efficacy. Is it via a conditioned response based on cultural familiarity, a logic of expectation that releases endogenous

pharmaceutics (such as the by now infamous endorphins), a hope-generated immunological boost that assists self-healing, or does it indeed remain in the psychological realm as an abreaction-aided restoration of cognitive order which enhances the well-being of a patient?[71]

The symbolic and clinical effectiveness of Vietnamese and British traditional herbal medicine

Now, it might well be asked what on earth do a few 20th century anthropological analyses of the healing rituals of Melanesian, Ndembu, Cuna and Azande communities have to do with the rise of St. John's Wort and Heantos into two prominent herbal remedies in the United Kingdom and Vietnam? To begin with, I argue that the 20th century recasting of primitive medicine into leechcraft and then traditional medicine on the one hand, and fringe medicine into alternative and then complementary medicine on the other, has been in part facilitated by the empirically argued point that these are not the simple, left-over, irrational or backward healing practices and systems that they had long been made out to be. At the same time, in building up a theory of symbolic efficacy, medical anthropology has also played an important role in solidifying a split between 'subjective' illness (where symbolic and cognitive pathways reign) and 'objective' disease (where bio-pathways reign), as well as suggesting possible placebo linkages between them via intermediate pathways. While it continues to be argued by many that the workings of a good part of traditional and alternative therapies are pretty much confined to the subjective realm of illness experience (e.g. assisting patients to cope with their diseases by providing them with a cognitive meaning framework or by engendering hope),[72] herbal medicine presents us with an interesting intersection of the symbolic and the somatic.

There is no doubt that indigenous traditional herbal medicine in both Vietnam and the United Kingdom comprises not only a range of plant-based remedies for certain ailments, but just as importantly a cognitive framework through which patients can 'think' about their health and illness and thereby conduct their lives accordingly. For example, in a recent handbook, Vietnamese Traditional Medicine is described not just as a collection of various

[71] See Harrington (1997) for a collection of essays that make their various cases on these points.
[72] For example, the House of Lords Select Committee's report on CAM categorised an entire group of treatments as complementary therapies that "give help and comfort to many patients when used in a complementary sense to support conventional medical care even though most of them lack a firm scientific basis" (see Chapter 3).

therapies (herbal medicine, acupuncture, massage, etc.), but also as a way of "thinking" – closely related to that of traditional Chinese medicine – that "sees disease as an imbalance between *yang* and *yin* in particular organs [which] directly affects the circulation of the body's vital energy (*khi*)" (Huu and Borton 2003: 19). During a consultation, the traditional practitioner uses three methods of diagnosis: "questioning the patient (information about his family, his birth, the functioning of his organs), inspection of the patient's tongue, eyes, sick organs, and so on, and the feeling of the patient's pulse (aimed at determining the nature and category of the disease)" (Hoàng, et al. 1999: 6). Through this diagnostic process, the traditional practitioner "discovers the nature of the imbalance and uses his knowledge of medicinal plants and traditional practices to restore the balance, to strengthen the *ki*, and normalise its circulation in the affected organs to re-create harmony with the universe, thus healing the patient" (Huu and Borton 2003: 19).

The handbook goes on to underline that consultations with traditional practitioners are very ordinary occurrences in Vietnam, and even that "some Vietnamese feel uncomfortable in a Western hospital with its smell of alcohol and other chemicals" (Huu and Borton 2003: 21). In the same way, when reporting on the many trials that have been carried out on Heantos at the Hoa Binh Centre for Drug Addiction since the mid 1990s, doctors highlighted that there had been no problem finding voluntary participants, specifically because many were "more comfortable" with taking a traditional Vietnamese remedy (Vietnam. Institute of Chemistry. 1998). Craig (2000: 709) has argued a similar point, suggesting that:

> Traditional Vietnamese medicine… has a positive affective value for many, and is linked with concepts of identity, familiarity (*quen*) and compatibility (*hop*). For some, it is 'our medicine' (*thuoc ta*), Eastern, as opposed to Western medicine. As such it is routinely characterised as benign, appropriate, compatible, and nutritious or strengthening, whereas Western medicine is widely perceived to be harmful and hot, needing to be restricted.

So, there is definitely a symbolic side to traditional Vietnamese healing, which is actively invoked in both the literature about it and in the daily practices of traditional medicine hospitals[73] and private traditional practitioners in Vietnam. Having said this, however, to suggest that healing effects resulting from traditional Vietnamese medicine (especially its herbal medicine) are limited to a psychological realm of symbolic pathways, or that their

[73] Which, for example, are described as smelling distinctively of herbs rather than chemicals.

only therapeutic function is to restore cognitive order thereby assisting Vietnamese patients to cope with their diseases, would be to ignore the arguments of a great number of traditional practitioners, traditional medicine users and scientists in Vietnam. For, although the symbolic value of traditional medicine is without doubt brought into play, there can be no question that claims to efficacy for traditional Vietnamese treatments today also refer to a specific physiological bio-efficacy. Hoàng et al. have ironically acknowledged that although the philosophical base of traditional Vietnamese medicine "might make quite a few modern physicians and scientists smile and think that it is only a medley of arbitrary ideas alien to anatomy, physiology, scientific therapeutics and pharmacology,… as it is, this system has ensured for thousands of years the health care of the majority of the population; it is a complex of conventional concepts for an empirical but effective treatment of disease" (1999: 7).

At the same time, it is nevertheless argued that "we need to research the results of our traditional medicine" by asking "do these ancient practices possess real therapeutic value?" (Bùi 1999: 35; Hoàng, et al. 1999: 28) And consequently, clinical testing of traditional therapies has become an important component of Vietnam's ongoing modernisation programme as described in the previous chapter, even more so since the Ministry of Health introduced new safety and efficacy requirements for industrially produced herbal remedies in 1996. According to these new requirements, herbal remedies are subject to pre-clinical quality controls, toxicity tests and pharmacological assays in animals. Pre-clinical data is then evaluated by a scientific committee, which will decide whether clinical trials can begin and also will be responsible for designing a trial protocol. Clinical trials are divided into a number of phases, with herbal remedies first tested in healthy volunteer subjects to evaluate absorption of the medicines, and only then in diagnosed patients to identify a suitable dosage. The next stage is to evaluate the clinical efficacy of a herbal medicine using either a double-blind randomised control trial with a placebo arm as comparison, or if it is considered to be unethical to treat a certain condition with placebo then comparison will be made against a control group receiving a modern medicine that is typically used for the condition under scrutiny. Clinical trial results will finally be evaluated by the scientific

committee, who will present their conclusions on the efficacy of the herbal medicine in question (Hoàng 2004; Vietnam. Ministry of Health. 1996).[74]

As a result, efforts to clinically validate the efficacy of Heantos since the early 1990s have in no way been unique to it, as in the past couple of decades animal and human trials have been carried out with various traditional therapies on such conditions as corneal ulcers, post-operative pain, arteriosclerosis, burns and insomnia to name a few. There are of course a number of ways in which this new focus on clinical testing might be accounted for. Some see an increasing focus on modernisation as yet another case of a so-called developing country succumbing to the orthodoxy of a western biomedical hegemony, thereby stripping an authentic traditional medicine of its 'real' value as it becomes modernised (see, for example, Janes 1999). Others suggest that it is part of an ongoing quest in many countries to once and for all "strip traditional medicine of 'superstitious' beliefs" (Van Esterik 1988: 757), by modernising them and subjecting them to rigorous scientific enquiry. What is clear is that modernisation as described in the previous and current chapters is ongoing. And as already underlined, ever since Ho Chi Minh appealed for a uniting of traditional and modern medicine, Vietnamese health officials, scientists and herbalists alike have consistently and adamantly argued for building an "alliance with modern medicine… as a basis for the development of a medicine which is specifically Vietnamese" (Hoàng, et al. 1999: 28; cf. also Huu and Borton 2003; Nguyen, et al. 1965).

The point here is not that there is some kind of complete consensus as to how, or indeed whether, herbal medicine should be modernised in Vietnam. Indeed, Nguyen has argued that modernisation of traditional Vietnamese medicine calls for a "cautious approach to avoid the risk of empiricism [on the one hand], and on the other hand, of scientific 'vanguardism'", and Hoàng has pointed out that there remains considerable resistance to double blind randomised controlled trials from doctors in Vietnam who see treatment with placebo as unethical (Hoàng 2004; Nguyen 1999: 38). Rather, what I argue is that herbal medicine in Vietnam, as it always has been, is under constant revision and it is currently being bio-politicised so as to contribute to the protection and promotion of the public health

[74] It is important to underline that these requirements are still very new in Vietnam, and it is in no way the case that all industrially produced herbal remedies have been subject to them. The point is rather that in the past decade or so, clinical trials have become an increasingly important component of the government's traditional medicine strategy (see also Vietnam. Ministry of Health. 2003).

of both rural and urban populations. What I would not argue, however, is that such a transformation has to be explained in terms of some kind of an ontological de-authentication of '*real*' Vietnamese traditional medicine, which as it happens emerged out of a specifically Chinese medicine, was consequently colonially challenged by a 'western' biomedicine, and is currently being reclaimed as a specifically Vietnamese medicine in alliance with modern medicine. Which of these three forms of medicine – an 'original' traditional Vietnamese medicine as developed out of Chinese medicine in the 15th to 18th centuries, a colonial biomedicine in the mid-19th to mid-20th centuries, or a modernised Vietnamese medicine as developed in the past fifty years or so – is the 'safest', 'best' or 'most effective' is a question that is far removed from the scope of this dissertation not to mention my own competences, but what I have shown up to now is how the answer to exactly that question is socio-historically dependent as seen in the different practices, tactics and strategies that have historically emerged around this question over time.

In the United Kingdom, indigenous herbal medicine is also described *both* in terms of a particular (or alternative) 'way of thinking' about health and healing (often described as "holistic"), as well as in terms of physiological effects in "certain organs or systems of the body" during the course of a treatment (NIMH 2004b). That is to say, the efficacy of herbal medicines is accounted for through both symbolic and physiological mechanisms of action. On the symbolic side, the patient's active participation in the healing process is often highlighted as crucial by herbalists, as is the notion of 'lifestyle'. Holistic herbal healing is far from being only about taking herbal remedies for different symptoms or conditions, but rather the healing process involves engaging patients and assisting them to understand that their lifestyle – including aspects of diet, stress, exercise, etc. – is the key to active maintenance of balance, harmony and thereby health. At a consultation, a herbalist will seek to identify the "underlying cause of the problem... which is [what is] treated, rather than the symptoms alone [as] treatment or suppression of symptoms will not rid the body of the disease itself" (NIMH 2004b). To do so "the Herbalist will take notes on the patient's medical history and begin to build a picture of the person as a whole being" (ibid.). Only then will treatment be recommended and, as described by the NIMH, herbal remedies are themselves 'merely':

> used to 'feed' and restore to health those parts which have become weakened... Treatment may [also] include advice about diet and lifestyle as

> well as the herbal medicine. As the body is strengthened so is its power and ability to fight off disease and when balance and harmony are restored, health will be regained. [Hence], healing is a matter of teamwork with patient, practitioner and the prescribed treatment all working together to restore the body to health. (NIMH 2004b)

In other words, the role of the Western herbalist is to facilitate the restoration of any imbalances or disharmonies (often seen as resulting from disobliging lifestyles), a process that it is imperative that the patient symbolically ascribes to as well. As put by NIMH herbalist Simon Mills in his *Essential Book of Herbal Medicine*, it is about offering patients "imagery and models of their illness that they can relate to", as well as forming a "common language allowing patient and physician to understand each other better" (1993: 21, 32). But again, to suggest that the efficacy of herbal medicine in the United Kingdom is confined to a symbolic realm, that restores cognitive order to a patient by allowing him or her to understand the underlying cause of imbalances and disharmonies, would be to neglect a central tenet of western herbal medicine, i.e. helping the *body* to help itself by strengthening its own *vis medicatrix naturae*. As put by Mills (1993: 150):

> the modern herbalist does not claim descent from the shaman... It is, of course, always the case that the therapist powerfully influences the therapy, but as in other crafts it is the nature of the material, the character of the remedies, that is the determining factor.

There is a vast and growing body of research in the United Kingdom and Europe that in the past decades has begun documenting the extent of the "independent activity of the herbs themselves" through clinical trials and scientific research (Mills and Bone 1999: xviii). This aspect of western herbal medicine is increasingly referred to as 'rational phytotherapy',[75] or the science of herbal medicine. From the previous chapter we can recall that as late as the 1980s, health authorities in the United Kingdom were slating herbalists "for clinging to outworn historical authority and for not assessing their drugs in terms of today's knowledge", and what many see as an increasing rationalisation of indigenous British herbal medicine could well be seen as a concrete response to this. The number of herbal medicines being clinically tested for efficacy is growing by the day, something not unrelated to what herbalist Andrew Chevallier has described as "justified… scepticism about claims for new 'wonder' treatments" (1999: 36), and the phytochemical search for the (multiple) active ingredients that might be responsible for any observed clinical effects

[75] *phyto* being the Greek word for plant.

of medicinal herbs or remedy mixtures has become equally intensive, as we will see in the following chapter.

Having said this, just as has been the case in the context of many developing countries such as China or Vietnam, this increasing rationalisation of the United Kingdom's traditional herbal medicine has generated much debate as to whether or not this is in fact stripping an authentic herbal tradition of its 'real' value. One of the fears that is often raised is that blind faith in randomised controlled trials, which rely on standardised treatments for standardised conditions, neglects the individualised and holistic herbal approach to treatment, as it is argued that "current medical research generally concerns itself only with measuring events and data divorced from the human being, ignoring the latter's immensely powerful forces for change and development in defiance of the clearest signs to the contrary" (Mills 1993: 237). Another fear, which will be addressed in detail in chapter 6, concerns the search for single active ingredients to account for pharmacologic action, which it is argued is in direct contrast to a herbalist's (as opposed to a rational phytotherapist) preference for using not only single *whole plant* extracts where a plant's many different active compounds act synergistically together, but also at times many different whole plant extracts together (so-called synergistic polypharmacy).

I will now turn my attention to the rise of Heantos and St. John's Wort to prominence during the 1990s. Both cases provide ample entries to the liabilities and possibilities of what some regard as an ambivalent modernisation of traditional herbal medicine. Interestingly, in both cases, establishing clinical efficacy has been a priority and only once the first indications of positive clinical effects were 'confirmed' did focus shift towards identifying pre-clinical biological mechanisms-of-action. This priority of establishing efficacy 'once and for all' should partly be understood in terms of the legacy of superstition or "outworn historical authority" that herbal medicine has endured in both countries, but it must also be placed firmly within a context of growing pressures to establish clinical efficacy above and beyond placebo in general, whatever the therapy in question, which has become one of the mantras of 'evidence-based medicine' (see Willis and White 2004).

Thresholds of efficacy – Heantos and the accumulation of evidence in the treatment of drug addicts

When the first trials with Heantos were authorised by the Ministry of Health in the early 1990s, it was probably not with the expectation that Tran Khuong Đàn and his herbal brew against addiction would become global headline news.[76] In fact, if the general scepticism of many biomedical doctors towards especially traditional Chinese medicine was anything to go by,[77] then there was probably good reason to believe that any claims to efficacy made for Heantos would be dismissed as unserious outside of Asia. But all this was to change in 1994 when anecdotal news emerged of a trial on 110 morphine-addicted war invalids at the Hoàng Long Rehabilitation Centre which suggested that following treatment with Heantos, up to 80% of these invalids had stopped picking up their free monthly rations of morphine provided to them by Vietnam's health authorities. Dr. Ha Anh, Head of the Institute of Orthopedics Science and Rehabilitation of Wounded Veterans and Invalids, who had followed the treatment of this group of invalids concluded in a report to the Ministry of Health that the "importance of Heantos is its ability to prevent re-addiction and to appease the patient's craving for drugs" (Vietnam. Institute of Orthopedics Science and Rehabilitation for Wounded Veterans and Invalids. 1996). This anecdotal indication of Heantos' efficacy in treating addiction was compelling enough for American scientists at the Johns Hopkins School of Medicine Chemical Dependence Unit to engage in initial discussions with Vietnamese scientists in January 1995. Having determined that samples of Heantos contained no substitute addictive substances, Johns Hopkins' scientists concluded that initial indications of Heantos' potential as an addiction treatment "warrant further study" (Jasinski 1997). Since then, the ongoing quest to validate the efficacy of Heantos in the treatment of addiction has pretty much read like concerted efforts to gradually notch up "levels of evidence" as endorsed by the WHO (2000b) (see Table 2), albeit not without numerous complications and contestations.

In the past fifteen years or so, the most significant of efforts to validate the efficacy claims of Heantos in the treatment of addiction have included: a whole series of 'quasi-

[76] News of Heantos broke internationally when the UN Development Programme and the government of Vietnam announced a joint project to fund trials in 1997 (see Boggan 1998; Graves 1997; Larimer 1997; The Washington Times 1997).

[77] For example, while Traditional Chinese Medicine has without doubt received greater attention in recent years outside of the region, its 'alternative' philosophical base and diagnostic approach led it to be classified in the 'unscientific' Group 3 of the House of Lords Select Committee CAM report.

experimental' studies carried out on "thousands" of patients at various treatment centres in northern Vietnam (including the above-mentioned trial with 110 morphine-addicted war invalids), treatment of a number of non-Vietnamese addicts from Europe and America to secure anecdotal testimonials, a series of controlled studies carried out under the auspices of an official United Nations-funded "Re-evaluation of the Safety and Efficacy of the Anti-drug Medication Heantos" initiated in 1997, a report by a "group of international experts" who visited Vietnam in 1999, and, most recently, preparation of a double-blind randomised controlled trial to be carried out at the University of Essen's Clinic for Psychiatry and Psychotherapy.

The involvement of the United Nations to "serve as protective umbrella" and as "venture capitalist" in the scientific development of Heantos in 1996 was pivotal in securing the initial funds required for clinically testing and scientifically investigating Heantos both within Vietnam and internationally (Morey 1997; UNOPS 1998a: 17). Before that, Heantos had been preliminarily approved for use in a number of treatment centres throughout Vietnam, and according to government officials, in the first half of the 1990s, Heantos was "used in the treatment of about 4,000 addicted patients… In practically all cases, the medication proved successful in detoxifying the patients, eliminating their withdrawal symptoms and stopping their cravings after a treatment of 5 to 7 days" (Tran 1997). Yet, as American scientists were quick to point out, documentation of these early 'quasi-experimental' trials with Heantos did not comply with "internationally recognised" standards. Nevertheless, Dr. Donald Jasinski of Johns Hopkins School of Medicine justified UN investment in further research by arguing that "reports from Vietnam on the utility of Heantos cannot be dismissed because investigations did not meet U.S. standards" (Jasinski 1997). Upon signing a cost-sharing agreement with the United Nations, the government of Vietnam underlined that it was "convinced of the potential of Heantos as an anti-drug medication", and that "it expects that the efficacy of Heantos can be further substantiated" through international cooperation (Tran 1997). In light of such growing scientific interest in his herbal remedy, Tran Khuong Đàn decided to join forces with phytochemists at Hanoi's Institute of Chemistry in June 1996, which has since been the central coordinating agency in the ongoing scientific development and clinical validation of Heantos.

From this point onwards, Heantos has been subjected to an increasingly "rigorous" programme aimed at clinically validating its efficacy. It is possible to identify two parallel

strategies for this validation process – on the one hand, a national effort to re-evaluate Heantos according to raised Vietnamese testing standards, and on the other, targeted efforts to gain international recognition. On the national side, although Vietnamese health officials had already indicated that they were convinced of Heantos' efficacy based on their initial experiences with it in various treatment centres, the introduction of new safety and efficacy standards for industrially produced herbal remedies in 1996, as well as the increased international attention that Heantos was receiving, led the Ministry of Health to call for the formation of a scientific advisory committee comprised of traditional medicine experts, pharmacologists, psychiatrists, drug treatment clinicians and health officials to oversee an official re-evaluation of the safety and efficacy of Heantos in October 1997 (Vietnam. Ministry of Health. 1997). It was this committee that was responsible for the designing of protocols for the first controlled clinical trials with Heantos, which were carried out at Hanoi's Central Psychiatric Hospital on 28 patients in the fall of 1998 and on a further 58 patients in 1999 and 2000.

Table 2: Levels of evidence[78]

Level	Type of evidence
Ia	Evidence obtained from meta-analysis of randomized controlled trials
Ib	Evidence obtained from at least one randomized controlled trial
IIa	Evidence obtained from at least one well-designed controlled study without randomization
IIb	Evidence obtained from at least one other type of well-designed quasi-experimental study
III	Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies and case control studies
IV	Evidence obtained from expert committee reports or opinions and/or clinical experience of respected authorities

The objectives of these first two controlled trials were "to determine the appropriate dose of Heantos to alleviate withdrawal from drug addiction", "to preliminarily assess the efficacy of Heantos in stopping addiction" and finally "to compare the effect of Heantos to that of ATK [neuroleptic] therapy in stopping addiction" (Vietnam. Institute of Chemistry. 1999).

[78] Taken from World Health Organization (2000b: 39) who in turn credit USA Agency for Health Care Policy and Research. This table is sometimes referred to as the 'Cochrane hierarchy'.

This was no short order, as the initiation of a formalised validation procedure inevitably entailed a number of definitional negotiations amongst committee members regarding the nature of the condition to be treated, diagnostic criteria for identifying potential trial subjects, as well as the clinical outcome measures that could confirm whether or not a patient was in the process of overcoming/had overcome the condition under scrutiny. In other words, the committee's task was to build up very practical templates of healing, which would indicate a measurable teleological chronology from pathological to normal, from an undesirable condition (toxicated and addicted) to a desirable state (detoxified and not craving). Such templates have become crucial for determining what role a particular healing intervention has in either speeding up a healing process or in making that process 'more comfortable'. The building up of standardised "clinical outcome measures" for all kinds of conditions has become a discipline in itself with the rise of randomised controlled trials and evidence-based medicine in the latter half of the 20th century. And, since drug addiction has become a key object of clinical study in recent decades (see Vrecko 2006), the business of developing and fine tuning diagnostic criteria for dependency on the one hand and templates of chemical non-dependency and non-craving on the other has proliferated. For example, ever since Himmelsbach proposed his pioneer withdrawal scale in 1942, a whole range of clinical rating scales and diagnostic criteria for substance dependence have emerged, including: DSM-IV criteria, ICD-10 criteria, Profile of Mood States (POMS), Subjective Opiate Withdrawal Scale (SOWS), Weak Opiate Withdrawal Scale (WOWS), Objective Opiate Withdrawal Scale (OOWS), Observed Opioid Withdrawal scores, Withdrawal Symptom Rating Scale, Craving Rating Scale, Addiction Severity Index, Wang Scale, and the Visual Analogue Scale to name a few.

What is clear is that the scientific committee responsible for re-evaluating the efficacy of Heantos could not have carried out their mandate without such templates. The protocols designed by the committee included admission criteria based on International Classification of Diseases-10 and positive TLC urine tests, and a range of clinical outcome measures based on a modified Himmelsbach withdrawal scale, Beck and Zung psychological tests for depression, biological tests (renal function and liver blood enzyme), haematology tests as well as electroencephalograms. It was this assemblage of clinical outcome measures that made up the initial Heantos healing template – a set of quantifiable and measurable indicators that could be gleaned from clinical observations, biological tests as well as a series of standardised, solicited subjective accounts from trial participants throughout their

protocolled 10-day treatment. Himmelsbach withdrawal scores were calculated from the 'objectively' observable and 'subjectively' extractable manifestation of a set of 12 withdrawal symptoms including yawning, craving, diarrhoea, insomnia, goose flesh and paraesthesia (see Plate 1). At set times, the clinician visited each trial participant to rate the severity of each symptom, giving a maximum of three marks for each symptom. The tabulation of this data in the different patients over the set, 10-day period could then provide a visual presentation of the performance of Heantos in "alleviating withdrawal from drug addiction", especially when compared against a non-compliant group of trial subjects (as happened in the first trial), a group receiving a different treatment (as happened in the second controlled trial), or against a group receiving placebo (as is planned to happen in the University of Essen trials).

As the two first controlled trials were only ten days in length, the scientific committee could not conclude anything about the efficacy of Heantos in "curing" addiction by eliminating cravings in the long-term, which has been one of its claims. Instead they were limited to commenting on the short-term efficacy of Heantos in alleviating withdrawal symptoms (including craving) during a ten-day detoxification treatment. Conclusions from the first controlled trial which compared the detoxification of 23 patients receiving Heantos to that of a group of five non-compliant patients, were that:

> in general, we found that Heantos supports the alleviation of withdrawal from drug addiction. The medicine has effects that reduce cravings, reduce paraesthesia, reduce symptoms of digestive disorder, recover the patients' sleep habits and that help the patients recover their health rapidly as well as clear their minds. (Vietnam. Institute of Chemistry. 1999: 43)

Conclusions from the second controlled trial were that:

> ATK [neuroleptic] therapy is more efficacious than Heantos in alleviating paraesthesia and insomnia whereas symptoms of diarrhoea and mydriasis were minor and appeared with lower frequency in patients treated with Heantos. The efficacy of Heantos is weaker than ATK therapy in alleviating drug craving. However, the overall health of patients treated with Heantos recovered more rapidly than of those treated with ATK (Vietnam. Central Psychiatric Hospital. 2002: 50-1)

At the same time, another confounding factor for the scientific committee has been an ongoing and parallel effort to improve extraction methods in the production of Heantos (see

chapter 6). While the very first 'quasi-experimental' studies were carried out with Heantos in its original liquid-syrup form, and the first two controlled trials were carried out with the first-ever batch of Heantos capsules produced at the Institute of Chemistry in April 1998 following two years of collaboration between Tran Khuong Đàn and plant chemists, by the time the controlled trials had been completed a new "improved" batch had been produced in October of 2001 following further phytochemical extraction and isolation work on the thirteen different plants that make up Heantos.

Nonetheless, notwithstanding these systematic and formalised efforts by an appointed national scientific committee to evaluate the short-term efficacy of Heantos in the alleviation of withdrawal from opiate addiction, scepticism has persisted both outside of the Asian region as well as within Vietnam. For example, local media in Hanoi reported the alleged deaths of up to six patients after treatment with Heantos in 1998, including suggestions by other herbalists (who it should be pointed out promoted rival detoxification remedies) that Tran Khuong Đàn was an "impostor" (see Boggan 1998). The WHO, while suggesting that preliminary Vietnamese clinical research results "indicate the potential of Heantos" has stressed that "international clinical testing" must be a crucial component of "a rigorous process of scientific evaluation" (WHO 2000a). Another UN agency, the UN Drug Control Programme, has argued that "there is insufficient information available… [and that] there does not appear to be any evidence that Heantos is more effective than any other products available for a similar 'treatment'" (UNDCP 2001). And finally, a recent article on Heantos in *Nature* suggested that international testing was necessary as "clinical research is weak in Vietnam" (Aldhous 2005: 569). For these kinds of reasons, the UN-funded project included from its beginning in 1996 a parallel drive to gain international recognition of the efficacy of Heantos via three specific routes: the treatment of a handful of foreign nationals to gain testimonial evidence of its efficacy on 'non-Vietnamese', the invitation of an international expert group of doctors and clinicians to witness the treatment of addicts with Heantos in Vietnam, and, finally, preparation of a double blind randomised controlled trial to be carried out in Germany (the first planned trial outside of Vietnam).

In the late 1990s, foreign nationals from Switzerland, Denmark, USA and Ghana were given permission to follow a treatment course of Heantos "on an exceptional basis", as prescribed by inventor Tran Khuong Đàn and closely monitored by both Vietnamese and accompanying medical doctors (UNOPS 1998b). The process was relatively similar in each

case, with international doctors responsible for preparing case histories on each subject that had been voluntarily selected in their country of origin, accompanying subjects to monitor their treatment with Heantos in Vietnam, reporting on what they had observed and, in a number of cases, securing testimonials from the treated subjects as well.[79] While these treatments were not designed as part of the formalised validation process, one of the more or less explicit rationales for securing these testimonials was to demonstrate that Heantos had an efficacy that was not somehow socio-culturally esoteric to Vietnam but rather 'universal' in a "diversity of cultural situations" (UNOPS 1998a: 8). As we saw earlier, both the inventor of Heantos and his scientist partners were well aware of biomedical scepticism towards traditional medicine.

In May 1999, five doctors and clinicians with experience in the treatment of drug addicts from America, Denmark, Sweden and Norway were invited by the Institute of Chemistry in Hanoi to visit Vietnam in order to "assess the utilisation and efficacy of Heantos" (Baehr, et al. 1999). The goal of this mission was to obtain the expert opinions of 'western' doctors and clinicians on the potential of Heantos as an addiction treatment, or put in another way, to secure 'level IV evidence' (see Table 2) on the efficacy of Heantos. During its six days in Hanoi, the international group of experts was given the opportunity to follow the detoxification of nine Vietnamese addicts and five western addicts. The addicts were given a treatment of Heantos according to a regimen provided by inventor Tran Khuong Đàn, which was divided into two phases, a 72-hour detoxification followed by three to four days to "restore the health condition of the detoxed addict" (Baehr, et al. 1999: appendix 2). While underlining the inherent limitations of such short observations, the expert group did conclude that based on their knowledge of addiction treatment "Heantos appears to be a better agent for detoxification than the standard methods used in… the western world", and

[79] A typical testimonial reads: "I flew out to Hanoi… and took the Heantos treatment. Since then I have not touched any drugs. The detox was good. It took away all the physical pain right from the first day. It also got rid of all the mental desire. I no longer want to take drugs. I did not do anything special for this to happen. I just took Heantos. The treatment is so perfect that the first night I slept 8 hours and then got up and went out for breakfast, lunch, and dinner. It was like that for the rest of the treatment. I do understand that after reading my words you must be thinking that I am still on drugs or completely off my trolley. But I can assure you that this treatment really works. I actually am not going to go on about how wonderful it is but let me say this, that with the quantities of cocaine, heroin, and 90 milligrams of methadone I was using, I would of need at least 6 months to get a good nights sleep, not mentioning the other BS that goes along with it. I think in the past 2 months I must of had 2 sleepless nights. I don't really think I should complain about that or consider that a withdrawal symptom but, I had to complain about something or it just wouldn't be me. I still wonder how those small capsules could do such a job. Heantos is actually the drug addicts dream come true, a pain free detox in 4 days and no more cravings to use again" (from http://hometown.aol.com/heanto/, accessed on 9 November 2005).

Clinical outcome measures

3.3 Kết quả điều trị :

- Kết quả điều trị cụ thể của từng bệnh nhân trong 10 ngày (xin xem phụ lục).

Bảng điểm hội chứng cai ở các nhóm:

	Điểm	Ngày 1	Ngày 2	Ngày 3	Ngày 4	Ngày 5	Ngày 6	Ngày 7	Ngày 8	Ngày 9	Ngày 10
I	Σ	132	283	239	140	95	62	50	41	32	28
	TB	8,8	18,86	15,93	9,33	6,33	4,13	3,33	2,73	2,13	1,86
II	Σ	99	259	197	124	84	56	45	35	22	22
	TB	7,6	19,92	15,15	9,53	6,46	4,30	3,46	2,69	1,69	1,69
III	Σ	56	110	114	92						
	TB	11,2	22	22,8	18,4						

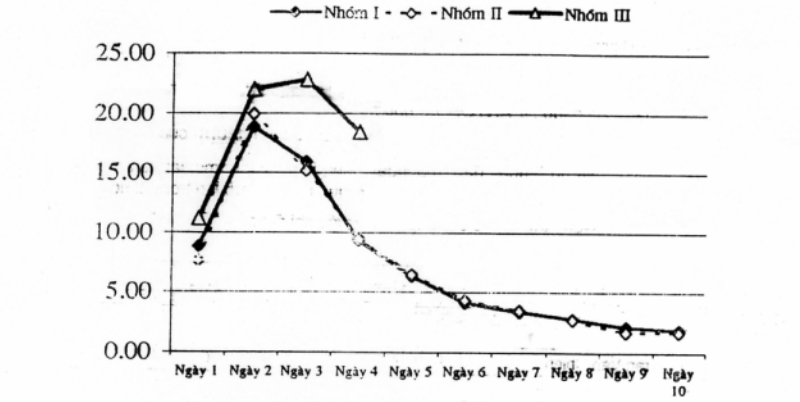
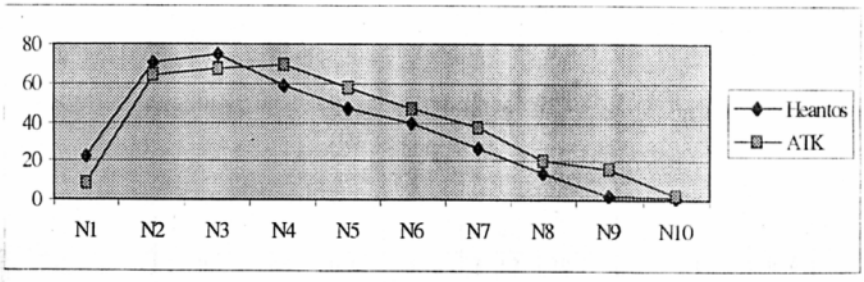


Table and graph of modified Himmelsbach withdrawal scale tracking withdrawal symptoms of a non-compliant 'control' group (Nhóm I) compared with two groups (Nhóm II & Nhóm III) following separate regimens of Heantos treatment over ten days (Vietnam. Institute of Chemistry. 1999)

Bảng 16:*Thèm ma tuý:*

	Ngày	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10
Heanto	Σ Điểm	34	108	115	89	72	60	41	21	3	2
	%Đ/ĐTĐ	22,22	70,59	75,16	58,17	47,06	39,22	26,79	13,73	1,96	1,3
ATK	Σ Điểm	4	29	30	31	26	21	17	9	7	1
	%Đ/ĐTĐ	8,89	64,64	66,67	68,89	57,78	46,67	37,78	20,0	15,56	2,2



Modified Himmelsbach table and graph comparing a group of 51 patients receiving Heantos treatment with a group of 15 receiving treatment with neuroleptics (Seduxen, Theralen, Tisercin, Paracetamol) over ten days (Vietnam. Central Psychiatric Hospital. 2002).

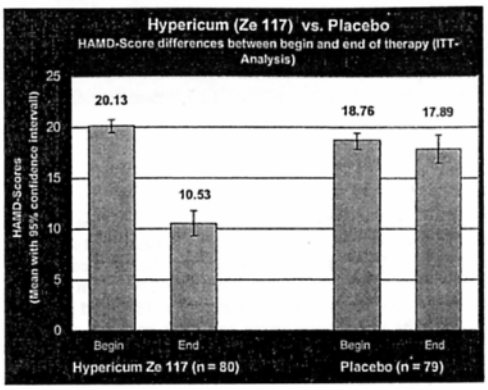


Fig. 1 Hypericum (Ze 117) vs. Placebo. HAMD-Score differences between begin and end of therapy (ITT-Analysis).

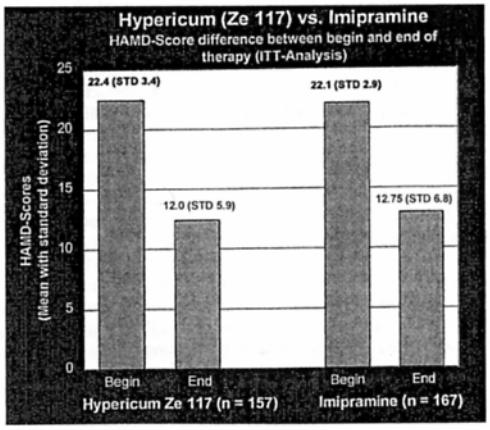


Fig. 2 Hypericum (Ze 117) vs. Imipramine. HAMD-Score difference between begin and end of therapy (ITT-Analysis).

Beginning and end of treatment depression scores of Hypericum (Ze 117 extract) vs. placebo patients and Hypericum (Ze 117 extract) vs. Imipramine patients over six weeks (Kaufeler, et al. 2001).

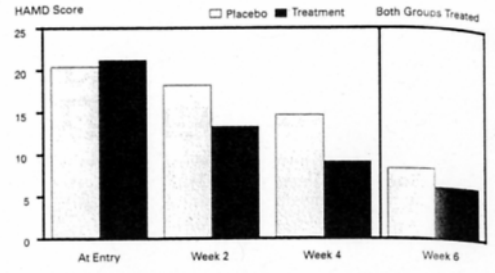


Figure 1. Hamilton Depression Scale (HAMD): at follow-up after 2 and 4 weeks, there were significant differences between the treatment and placebo groups ($P < .001$). During weeks 5 and 6, when both groups were given the trial drug, there was a significant improvement in the (original) placebo group.

Hamilton Depression graph comparing depression scores of a group of 33 St. John's Wort (LI 160 extract) patients with a group of 34 placebo patients over 6 weeks (Hansgen, et al. 1994).

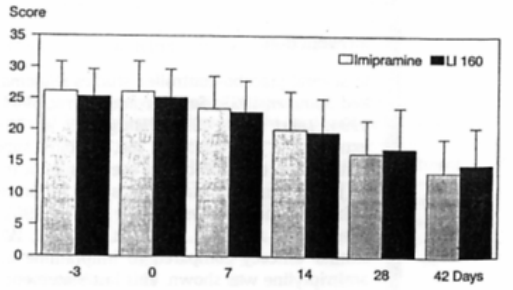
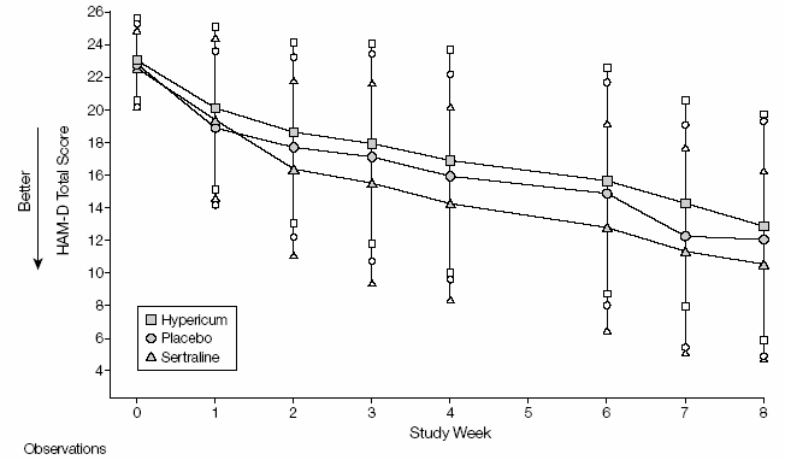


Fig. 1 HAMD-total score during the treatment period.

Hamilton scale comparing average depression scores of a group of 107 St. John's Wort (LI 160 extract) patients with a group of 102 Imipramine patients over 42 days (Vorbach, et al. 1997).

Figure 2. The 17-Item Hamilton Depression (HAM-D) Scale Total Score by Acute Phase Week



Observations								
Hypericum	113	101	102	100	97	91	82	82
Placebo	116	111	107	94	99	93	84	84
Sertraline	109	99	88	88	87	80	77	77

Graph comparing Hamilton depression scores of 113 Hypericum patients with 116 placebo patients and 109 Sertraline patients over 8 weeks (Davidson, et al. 2002).

that "using Heantos under the prescribed dosage scheme does not appear to generate any objective signs of withdrawal, few or no subjective complaints were made by the patients" (Baehr, et al. 1999: 7). Finally, following a similar visit to Vietnam by German clinicians from the University of Essen later in the same year, the regional government of Nord-Rhein Westfalen agreed to fund a double-blind randomised controlled trial in Essen at the Clinic for Psychiatry and Psychotherapy. The trial, which is pending final authorisation from German health officials,[80] has been designed as a double-blind randomised controlled trial with the efficacy of Heantos in treating withdrawal compared to a placebo arm.

As we have seen, the efforts to validate the efficacy of Heantos can be understood as a series of more or less coherent attempts to ascend the WHO's levels-of-evidence hierarchy, especially in the face of scientific scepticism towards traditional medicine on the one hand, but also towards the capacity of Vietnamese scientists to carry out "rigorous" research on the other. At the same time, assessments of Heantos' efficacy in the alleviation of withdrawal symptoms have relied on standardised diagnostic admissions criteria to identify relevant trial subjects, as well as standardised clinical outcome measures which allow for the quantification and tabulation of clinical trial results. While the trial results to have come out of Vietnam so far have on the whole been positive, this has not as yet translated into the "international recognition" that clinical testing outside of Vietnam is considered requisite by, for example, the WHO and UNDCP, who have at best been sceptical of the capacity of Vietnamese scientists to carry out "rigorous" clinical trials. Moreover, as we will be seeing, the ongoing effort to scientifically develop Heantos that has resulted in frequent formula changes has opened up the question of just what is being tested for efficacy: a particular active ingredient, a whole plant extract, many different whole plant extracts combined in a specific (yet changing) way, or an entire 'holistic' way of treating addiction which includes the use of Heantos? Let us now turn to the past twenty years worth of efforts to validate the efficacy of St. John's Wort in the treatment of depression.

Templates of healing – St. John's Wort and the psychometrics of depression

While Heantos has been subject to relatively few clinical trials to date, the same cannot be said of St. John's Wort. In fact, together with garlic (*allium sativum*) and ginkgo (*ginkgo biloba)*, St. John's Wort (*hypericum perforatum*) has become one of the most clinically

[80] This was the status in October 2006.

studied plants in the world.[81] As described in the introduction to this chapter, although there had been some interest in the anti-depressant action of St. John's Wort throughout the 20th century, the vast majority of its clinical testing has taken place in the past two decades. And not so surprisingly, it was in Germany that this late 20th century intensification of clinical studies began,[82] eventually spreading to America and Europe. In December 1984, the German Commission E[83] published the first of 360 medicinal herb monographs based on extensive bibliographic reviews. Among these was a monograph for the well-known German folk remedy plant *johanniskraut*. While there was little clinical data available at the time on St. John's Wort, an otherwise long bibliographic reference trail led the 24-person Commission (made up of physicians, pharmacists, non-biomedical practitioners, pharmacologists, toxicologists and biostatisticians) to list "psychovegetative disturbances, depressive moods, anxiety and/or nervous unrest" as possible treatment uses for it, as well as to note that "a mild antidepressant action of the herb and its preparations has been observed and reported by numerous physicians" (Heilpflanzen-Welt 2005).

As it happened, this positive monograph would be an important catalyst for a spate of clinical trials in the ensuing ten years, a good part of which were funded by herbal medicine manufacturer Lichtwer Pharma in Germany (see Müller 2005). By the mid 1990s, at least 37 clinical trials had been carried out on extracts of hypericum, enough for Linde et al. (1996) to carry out the first meta-analysis of clinical trials that had compared the efficacy of St. John's Wort in the treatment of depression against either placebo or standard antidepressant treatments. Based on these inclusion criteria, Linde et al. analysed 23 out of the 37 identified trials, concluding that "there is evidence that extracts of hypericum are more effective than placebo for the treatment of mild to moderately severe depressive disorders" (1996: 253). While use of St. John's Wort had been growing steadily in Germany since 1984,[84] it was this meta-analysis published in the *British Medical Journal*, together with some of the first pre-clinical study results on possible pharmacological

[81] A simple PubMed clinical trial-related search gave 109 articles for 'allium', 195 for 'ginkgo' and 116 for 'hypericum'. See also American Botanical Council (1999).
[82] As mentioned earlier, Dr. K. Daniel had carried out the first controlled trials with *hypericum perforatum* before WWII broke out, reflecting a significant German scientific tradition in plant bio-chemistry that was consistent throughout the 20th century (see Timmermann 2001).
[83] A commission established by the German Federal Institute for Drugs and Medical Devices following the passing of Germany's Second Medicines Act in 1976 to review the safety and efficacy of 'phytomedicines' available on the German market.
[84] By 1997, *johanniskraut* extract had become the most prescribed single antidepressant in Germany, making up as much as 25% of all prescriptions for antidepressants, sales of Licthwer Pharma's St. John's Wort extracts tripled from $23 million in 1994 to $66 million in 1996 (Müller 2005: 2; Nash and Cray 1997).

antidepressant mechanisms of action published in 1994 and 1997 *Pharmacopsychiatry* supplements, that would re-introduce St. John's Wort to the English-speaking world. In an interesting coincidence, in the exact same months that news of Heantos was breaking in the world press in 1997, a flurry of media stories suggesting that St. John's Wort might be "Nature's Prozac" also emerged, citing the recently published clinical and pre-clinical research (see Andrews 1997; Hicks 1997; Johnson, et al. 1997; Nash and Cray 1997). And the effect of this media storm would be tangible as St. John's Wort virtually overnight transformed into one of the world's first herbal 'blockbusters' throughout Europe and America, notwithstanding persistent reminders from herbal practitioners that Hypericum has a much wider use and is most often used by herbalists as one element of a holistic 'polypharmacy' approach (Chevallier 1999: 12, 91).[85]

Today, two decades after Commission E's monograph was first published, extracts of St. John's Wort remain a popular treatment for especially mild depression, and there is no sign that clinical interest is abating.[86] At the same time, it cannot be said that a clear consensus has emerged as to the therapeutic merits of St. John's Wort in the treatment of depression. Debates have centred around five specific concerns: the possibility that St. John's Wort extract can negatively interact with other commonly used drugs; the drastically varied quality of extracts available to unknowing consumers; pharmacologic debates over which of the many active ingredients found in St. John's Wort extract (if any) are responsible for antidepressant activity (which has bearing on extract standardisation and quality control of products); disputes over whether St. John's Wort is only effective in cases of mild depression as opposed to moderate and major depression;[87] and finally, whether it is more effective than standard antidepressants. On the other hand, it is widely agreed that St. John's Wort has a much better safety profile than pharmaceutical antidepressants, although concerns about negative drug interactions and low quality extracts have certainly troubled this consensus to some extent.

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[85] The sales figures for the US market were spectacular in the final years of the 1990s, with some estimates suggesting that sales jumped 190% from $48 million in 1997 to $140 million in 1998. In Europe, sales figures for 1998 have been estimated at $6 billion. And in Britain, an estimated 2 million people were using St. John's Wort in 2000. Ironically enough, increased attention to St. John's Wort also resulted in a number of media reports suggesting that St. John's Wort negatively interacted with a number of commonly used conventional drugs, which resulted in an almost immediate sales decline in Europe and America (Blumenthal 1999; Kelly 2001; Lawson 2000).

[86] An updated meta-analysis by Linde et al. from 2005 identified a total of 68 randomised or possibly randomised trials with St. John's Wort (Linde, et al. 2005).

[87] See, for example, Davidson et al. (2002) for a review of a trial which did not find St. John's Wort more effective than placebo in the treatment of major depression.

Notwithstanding these various important clinical debates, a common theme to emerge from the past two decade's worth of clinical literature on St. John's Wort is once again the pivotal role that standardised diagnostic criteria, rating scales and clinical outcome measures have played in efforts to confirm or dismiss its claims to efficacy. Clinical efficacy is simply not feasible without this infrastructure. Just as the scientific committee charged with the re-evaluation of Heantos had been faced with the task of building up psychological and physiological templates of healing as a prerequisite for quantifying clinical observations into recordable and visualisable clinical outcomes, so too have the many clinicians who over the past years have studied the antidepressant efficacy claims of St. John's Wort had to build up similar templates of healing. And also, in the same way that the emergence of drug addiction as a key object of clinical research spawned an entire range of standardised diagnostic criteria (for trial subject selection) and clinical rating scales (for measuring clinical outcomes), so too did the emergence of depression as an object of clinical research. Starting with Max Hamilton's "rating scale for depression" from 1960 (now known as the Hamilton Depression Rating Scale or HAM-D) and Aaron Beck's "inventory for measuring depression" from 1961 (now known as the Beck Depression Inventory or BDI), designing diagnostic criteria and rating scales for depression has become an industry of its own.

Table 3 lists those diagnostic criteria and rating scales that have to date been used in clinical trials with St. John's Wort. While it is normal for trial protocols to include up to four or five different rating scales, by far the most-used scale for outcome measuring in these trials has been the HAM-D, the "gold standard" for the clinical assessment of depression in general (Bagby, et al. 2004). The HAM-D is a quantifiable depression scale that allows clinicians to rate the intensity of depression (absent, mild, moderate or severe) that a patient is suffering from at any given time. A clinical trial protocol will specify diagnostic criteria, length of observation period as well as the number of times a trial subject's level of depression is to be measured. The HAM-D is a so-called "observer-rated" scale meaning that it is the clinician rather than the patient who carries out the rating – although it would perhaps be more accurate to describe it as an elicitor-rated scale, since scoring on the bulk of the 17 indicators that make up the HAM-D questionnaire relies on the trial participant "indicating", "communicating", "expressing" or "agreeing on" symptoms of depression such as "guilt feelings", "lack of motivation", "anxiety" or

"irritability", often after prompting by the clinician. Even the somatic or physiological indicators on the HAM-D scale rely largely on the subjective accounts of the trial participant regarding, for example, "feelings of fatigue", "abdominal symptom experiences", "insomnia" or "gastro-intestinal complaints". The few indicators that are observed without elicitation by the clinician are "non-verbal communications", such as agitation, retardation and "estimations of weight loss". In the words of MD Norman Rosenthal in his *St. John's Wort – The Herbal Way to Feeling Good*, "although a skilful clinician will see traces of depression in a person's face, observe sluggishness or agitation in the body's movements, and hear the slow cadence of the voice, it is the depressed person's own story that will carry the day in making the diagnosis" (Rosenthal 1998: 103).

Table 3: Rating scales and diagnostic criteria used in SJW trials[88]

HAM-D	Hamilton Depression Scale
CGI	Clinical Global Impression Index
GAF	Global Assessment of Functioning
HAM-A	Hamilton Anxiety Scale
MADRS	Montgomery Asberg Depression Rating Scale
D-S	Depression Scale von Zerssen
SRSD	Self-Rating Scale for Depression
BDI	Beck Depression Inventory
Bf-S	Adjective Mood Scale
SDS	Sheehan Disability Scale
QoL	Fragebogen Alltagsleben
B-L	Complaint List von Zerssen
GPA	Patient's Global Assessment Scale
SCL-58	Symptom Check List
SB-S	Subjective Complaints Scale
STAI	State Trait Anxiety Inventory
ZDS	Zung Depression Scale
SCL-90-R	Symptom Check List Derogatis
ICD-10	International Classification of Diseases
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders

[88] Extracted from Linde et al.'s (2005) meta-analysis of 37 randomised trials.

Once each of the 17 indicators has been evaluated by the clinician (with some indicators given 0 to 2 points and others 0 to 4 points), a trial subject can be given a total score out of a maximum of 52. These total scores can then be monitored over time at periodic intervals, tabulated and eventually graphed. And while there is no universal agreement on what each score signifies, there is a tendency to grade scores in the low 10s as mild, the high 10s as mild to moderate, and the 20s as moderate to severe.[89] For a treatment to be considered efficacious in the treatment of depression, it has to demonstrate a reduction in HAM-D (or other scale) scores that is greater than reductions experienced by trial subjects receiving placebo to a statistically significant degree. Importantly, just as was the case with the Himmelsbach withdrawal scale scores in the Heantos trials, the visual presentation of HAM-D scores over time have played a key role in this 'demonstration of efficacy' in St. John's Wort trials (see Plate 1).[90]

It is crucial to point out just how significant a role the infamous 'placebo effect' has played in clinical trials investigating the efficacy of St. John's Wort in the treatment of depression. Put in simple terms, patients who are given a placebo rather than St. John's Wort get significantly better during the course of a clinical trial. For example, in Sommer and Harrer's (1994) double-blind, placebo-controlled trial of the efficacy of St. John's Wort in the treatment of mildly depressed patients, the mean reduction in HAM-D scores of the 42 patients receiving St. John's Wort was -9 points compared to -5 points for those who received placebos (both from a baseline of 16) after 4 weeks of treatment. In Hansgen et al.'s (1994) multicentre, double-blind trial of the efficacy of St. John's Wort in the treatment of major depression, the mean reduction in HAM-D scores of the 33 patients receiving St. John's Wort was -13 points (from a baseline of 22), compared to -6 points (from a baseline of 20) for those who received placebos after 4 weeks of treatment. In Lecrubier et al.'s (2002) double-blind, placebo-controlled trial of the efficacy of St. John's Wort in the treatment of major depression, the mean reduction in HAM-D scores of the 186

[89] These categorisations, it turns out, have come to be crucial in debates over the efficacy of St. John's Wort extracts, as clinical trials that have suggested an efficacy that is not superior to placebo in trials targeting patients suffering from moderate to severe depression have not silenced proponents of St. John's Wort as a "mild antidepressant".

[90] Further to such "observer-rated" scales as the HAM-D or the Clinical Global Impression Index, a number of self-rating scales for depression have also been developed which typically present trial participants with a number of statements, such as "I feel down-hearted and blue", "I have crying spells" or "I still enjoy sex", to which they have to indicate a little, some, good part or most of the time. These answers are then tabulated into total scores and can be monitored over time.

patients who received St. John's Wort was -10 points compared to -8 points for those who received a placebo after 42 days (both from a baseline of 22). And finally, in Shelton et al.'s (2001) randomized controlled trial on the effectiveness of St. John's Wort in the treatment of major depression, the mean reduction in HAM-D scores was -7 points (from a baseline of 22) for those who received St. John's Wort, and -6 points (from a baseline of 23) for those who received a placebo after 8 weeks.

Now, while it would be far too simplistic to conclude something like 'at least 50%' of the efficacy of St. John's Wort is due to the placebo effect, it is nevertheless important to understand that when it comes to treating depression with St. John's Wort (or any other antidepressant for that matter) there is a lot more going on than bio-pharmacological activity.[91] Indeed, as was discussed earlier, randomised controlled trials have emerged out of a need to demonstrate an efficacy that is 'above and beyond placebo', and are rooted in a relatively recent positing of inevitable and measurable treatment effects (detectable "in the end organs") which are not specific to the medicine or treatment under trial. As the argument goes, even in the controlled settings of a clinical trial, "non-specific" effects resulting from an authoritative clinician-trial subject relationship, expectation on the part of the patient, the act of self-rating, or being interviewed periodically by a clinician are inevitable. That is to say, it is suggested that the clinical trial itself – in much the same way that a consultation with a GP or herbalist might – can generate symbolic efficacy in clinical trial participants which may then spill-over into measurable outcomes. Moreover, it is also argued that further to taking part in a clinical trial, a patient may also be actively reading up on St. John's Wort literature, introducing changes to his or her lifestyle and in general embracing an active approach to getting better, all of which may contribute to both symbolic and physiological efficacy. And finally, it is also pointed out that it cannot be excluded that the "natural history" or "self-limiting nature" of a condition such as depression in some patients mean that they 'would have gotten better anyway' with or without treatment (see Kaptchuk 1998b; Kirsch and Sapirstein 1998). It is in these different

[91] In a meta-analysis of 19 double-blind, placebo-controlled clinical trials of standard anti-depressants, Kirsch and Sapirstein (1998) controversially argued that "inactive placebos produced improvement that was 75% of the effect of the active drug", and consequently that "approximately one quarter of the drug response is due to the administration of an active medication, one half is a placebo effect, and the remaining quarter is due to other nonspecific factors". While their article has been subject to considerable methodological critique, their point concerning the significant role that "placebo response" plays in overall treatment is relevant nonetheless.

ways that bio-efficacy, placebo efficacy and symbolic efficacy circulate in efforts to clinically test St. John's Wort in the treatment of depression.

In the particular case of depression, a confounding factor arises from the fact that although depression has in recent years, as we will see in the following chapter, acquired some kind of a neurochemical-pathway-facilitated physiological base, assessments of a drug treatment's efficacy are reliant on a patient's subjective recounting of any self-perceived therapeutic change. That is to say, it is not serotonin, dopamine, noradrenaline or glutamate levels that are measured over time to demonstrate efficacy, rather it is a patient's symptomatic *experiences* (as reported by him or herself) of helplessness, guilt and insufficiency that are recorded, quantified and monitored over time. So there is an inbuilt tension (not unlike that found in debates over the placebo effect) in clinical trials between "bloodless, gutless theories of cognition" (Wilson 2004: 42) on the one hand, and neurological, 'end-organ' theories on the other.[92] Are "observer-rated" feelings symptomatic manifestations of essentially (bio-)physiological disturbances as suggested by "pre-clinical" pharmacological studies of antidepressant mechanisms of action, or are they symptomatic utterances resulting from essentially non-physiological affective disorders? Whatever the case, it is clear that assessments of efficacy in depression treatment trials today rely on the 'objective' quantification of a range of 'subjective' indicators.

Conclusion

In this chapter, it has been my intention to demonstrate the many and often overlapping assumptions that have arisen over the past century or so out of a persistent and stubborn attendance to the central question of "does it work?" in herbal medicine. What I have argued is that concepts of efficacy are dependent on the objects to which they refer/ describe. By distinguishing between the bloodless, gutless symbolic efficacy that medical anthropologists have meticulously sought to describe in their ethnographic accounts of healing rituals on the one hand, and the physiological bio-efficacy that clinicians and pharmacologists have equally painstakingly sought to document through *in vivo*, *in vitro*

[92] It must be underlined that this tension is particularily relevant in cases of chronic disease (such as depression and addiction) where improving quality of life is much more the therapeutic object than longevity, even if this latter object also plays a significant part in treatment considerations. With acutely life-threatening conditions (e.g. many forms of cancer) "survival is the gold standard by which [treatments] are judged" (Edwards cited in BBC News Online 2006). See chapter 7 for an in depth discussion on the distinction between quality of life and life itself.

and clinical experimentation on the other, I have shown how it is the placebo effect that has emerged as a possible intermediate link between the two. For the placebo effect relies at one and the same time on both symbolic (hope, expectation, cognitive homeostasis, etc.) and physiological (end-organ normalisation) concepts of efficacy. What should be clear from the experiences of Heantos and St. John's Wort that I have recounted here, is that even after a battery of clinical trials, expert group reports and meta-analyses, answers to the question of whether a therapy or medicine works are far from simple and clear-cut: they are complex and rarely definitive.

Herbal medicine purports to work not just symbolically by providing users with ways of thinking about and relating to their conditions, but also via specific biological effects in the organs of the body. The intermediate pathways that link the symbolic and the physiological facilitate both cure and pathology, with stress, anxiety or fear potentially leading to physiologically manifest psychosomatic disorders, and their opposites in hope, expectation and 'peace of mind' potentially generating physiologically therapeutic (placebo) effects. They also allow for the reverse, as somatic manifestations of disease can generate anxiety and fear while somatic improvements can generate hope and expectation. And so it is somewhere within this complex of inter-crossing pathways which can be symbolic, physiological or somehow intermediary, that assurances of efficacy are sought after by anthropologists, clinicians, herbalists and pharmacologists alike.

The randomised controlled trial in its current form has sought to separate out what is seen as the "specific" efficacy of a treatment or remedy (an efficacy that is directly dependent on that treatment or remedy and nothing else), as opposed to "non-specific" efficacy which is often seen as arising in good part from the symbolic efficacy that participation in a clinical trial will invariably generate. Yet, the role of blinding and the use of placebo or 'sham' treatments as comparisons is not so much for the purpose of exposing a fraud, but rather more for determining whether or not a treatment or remedy has an efficacy that is "above and beyond" the efficacy that almost any healing intervention will generate. Nevertheless, following Wilson (2006), we might say that herbal medicine 'works' not in spite of but rather in active collaboration with the placebo; 'true drug effect', 'placebo effect' and 'symbolic effect' are inseparable and indeed each contribute to a drug or treatment's 'total effect' and thereby to a patient's self-reported *experience* of 'getting better', however "non-specific" placebo and symbolic effects are considered.

In the following chapter we will turn our attention towards what are known as ‘pre-clinical’ accounts of the mechanisms of action which might explain any clinically-experienced efficacy that is above and beyond placebo, although in the cases of St. John’s Wort and Heantos this mechanism of action research has most certainly been post-clinical. As we will see, also in the field of mechanism of action research – which seeks to answer not whether, but how a medicine or therapy works – contestation and dispute prevails. For, as Canguilhem (1989) has shown us, to discover how a medicine works depends entirely on the concepts, objects and norms that are seen to allow for this ‘working’ to take place.

6 Pathways to plausibility

In giving evidence on the growing use of complementary and alternative medicines to the House of Lords Scientific Committee in 1999, Professor Tom Meade, of the UK-based scientific academy The Royal Society, argued that "the distinction between the effect and the explanation for the effect is central, and you do not need to believe in the explanation in order to believe in the effect" (Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000: 4.32). In doing so, Professor Meade underlined the kind of clinical/pre-clinical split that has been characteristic of recent research into both Heantos and St. John's Wort – a split that is reflected in the largely separate worlds of clinical trial research and pharmacological laboratory research. This split is perhaps even more accentuated when dealing with chronic rather than acute conditions, with clinicians, on the one hand, engaged in observing, measuring and calculating trial subjects' experience of a condition (such as addiction or depression) before, during and after a particular treatment regimen as a means to address the central question of *whether* this treatment works. Pharmacologists, on the other hand, are engaged in mapping out possible bio-physiological pathways often with the help of animal models as a means to address *how* a particular treatment works.

At the same time, Professor Meade's distinction between *believing* in the effect of a treatment as opposed to explanations for that effect also highlights one of the key battlegrounds of debates not just about traditional, complementary and alternative medicines, but also within modern medicine. It is an epistemological battleground of truth politics in which the established is contrasted against the esoteric, the rationalist against the vitalist, the mainstream against the alternative, or the accepted against the radical, as various sets of competing explanations of efficacy for particular treatments vie for 'plausibility'. It is also a battleground in which attempts at combining different approaches to explaining a treatment's effects are made. And as we saw in the previous chapter, it is often argued that in the process of being mainstreamed, previously marginalised and esoteric bodies of knowledge are being biomedically colonised and thereby stripped of their epistemologically distinctive value. For example, when the effects of acupuncture are investigated in terms of its effects on the stimulation of endorphin receptors rather than energy flows along vital meridians, when the efficacy of St. John's Wort is accounted for in

terms of a regulation of the reuptake of serotonin rather than the nourishing of the body's battered nervous system, or when treatment effects arising from homeopathic remedies which "may not contain even a single molecule of the active principle" (Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000: 4.35) are ascribed wholly to spill-over placebo effects rather than to Hahnemann's law of similars, critics argue that the teachings of traditional Chinese medicine, herbalism and homeopathy are pretty much bypassed, eventually reducing these vitalistic treatments to the mechanistic explanations of biomedicine.[93]

In this chapter, rather than making any attempt at evaluating the validity of particular explanations of efficacy, I will focus my attention on the concrete practices of 'pre-clinical' validation that have contributed to the emergence of St. John's Wort and Heantos as two prominent herbal remedies in the British and Vietnamese contexts respectively. In doing so, I will show how herbalists, ethno-botanists, phytochemists, pharmacologists and clinicians have often joined forces in the as yet unfinished attempts to explain how these two remedies work. This is not to say that there has necessarily been a complete consensus as to what are seen as the most important mechanisms of action at play in the treatment of addiction and depression, but whatever the 'incommensurability', this does not seem to have prevented cooperation between herbalists and scientists. Moreover, as the hypericin and hyperforin hypotheses in pharmacological St. John's Wort research have shown, diverging explanations of mechanisms of action can also emerge within a supposedly coherent biomedical approach, as can models based on the 'synergistic' workings of multiple active ingredients. Having said this, it will be an important part of this chapter to show how differing conceptions of the ways in which a plant's different components work to elicit a therapeutic response come into play in what I will argue has been a steadily intensifying *disciplining of medicinal herbs* in both Vietnam and the United Kingdom.

There are three particular routes to this disciplining that I will highlight in the following. The first pertains to the 20th century appearance of the so-called *ethno*-sciences. These

[93] For example, in the context of recent efforts to modernise Chinese medicine, Kaptchuk argues that such approaches "are aimed at separating out the effective components of Chinese medicine and introducing them into the framework of modern Western medicine… Yet, although this knowledge, with its use of traditional herbs and acupuncture, has the veneer of Chinese medicine, the actual application and methodology are clearly Western in orientation. The theory of Yin and Yang and other traditional concepts are left behind" (1983: 24).

sciences emerged to counteract problems related to accessing knowledge and expertise that has not necessarily accumulated in an organised and documented form, but has instead been passed down orally through the generations, for example, via herbal apprenticeships. The emergence of ethno-botany, ethno-biology, ethno-pharmacognosy and ethno-pharmacology as specific sub-disciplines in the early 20th century can be understood as a bio-scientific response to a perceived value in what had previously been disregarded as little more than the superstitions of the thousands of ethnic groups found throughout not just the so-called 'developing world' but also in many industrialised countries. As we saw in chapter 4, in both the United Kingdom and Vietnam, specific efforts have been made to scientifically collate and tap into the 'indigenous knowledge' of ethnic and lay groups.

Secondly, following Kinghorn (2004), I will argue that the disciplining of herbs in both countries in the latter half of the 20th century has increasingly shifted from a molar botanical level towards a molecular bio-chemical level. As such, the isolation, characterisation and structure elucidation of active ingredients found in ethno-botanically identified medicinal plants have become central elements in the continuing development of herbal remedies today, including St. John's Wort and Heantos. Interestingly, the intensification of this chromatographic phytochemical mapping of medicinal plants has been in part facilitated by the rejection of the so-called 'waste hypothesis' of natural products chemistry. According to this hypothesis, only a plant's primary metabolites (e.g. carbohydrates, proteins) were of scientific interest while its many secondary metabolites (e.g. alkaloids, flavonoids, carotenoids) were nothing more than the plant's waste products, analogous to animals' excrement. Today, phytochemists ascribe plants' secondary metabolites a protective function in warding off herbivores, fighting off parasites or killing off microbes, and as such have become the object of increased pharmacological research. However, some herbalists argue against this defence-hypothesis, alternatively suggesting that the fact that plants produce substances that have "no apparent role in the plants themselves" yet are "physically healing and spiritually enhancing for human beings" represents yet more evidence of a universal balance and harmony between "plant and human realms" (McIntyre 1988: 38-9).

Finally, I will argue that in the search for "plausible mechanisms of action" there has been a specific emphasis on identifying possible bio-physiological pathways to explain the efficacy of herbal remedies such as St. John's Wort and Heantos, which in turn underpins

assumptions about the conditions to which the therapies in question relate, e.g. depression and addiction. For, in accounting for the therapeutic work that the ingestion of St. John's Wort and Heantos – whether taken as a tincture, a tea or a standardised, dried extract capsule – can instigate *physiologically*, scientists argue that a herbal remedy contains within it a curative potential (in the form of active chemical compounds) that will be released as the remedy enters the body, becomes bioavailable and thereby influences otherwise independent physiological workings. It is as a direct result of such physiological changes that pharmacologists argue the *experience* of depression or addiction in a suffering subject will be affected in a therapeutically significant way.[94] Mapping out this chain of events, increasingly at the molecular level, is of course the domain of a range of specialist sciences from phytochemistry to toxicology and pharmacology (including pharmacokinetics, pharmacodynamics and pharmacognosy), each of which has become important in the ongoing development of St. John's Wort and Heantos. But it is also, as we will see, in the pharmacological description of mechanisms of action that contestations have arisen over 'additive' as opposed to 'dynamic' synergism between a plant's or plant mixture's multiple active ingredients.

Prospecting ethno-knowledge

It is an oft-cited wisdom in the field of herbal medicine that if a remedy is still around after centuries of documented use, then there must be something to it.[95] Indeed, so persuasive is this argument that it has played an important part in what Parry (2004: 150) has called a "resurgence of interest in collecting biological materials" for medicinal or industrial use in the latter part of the 20th century. There is of course nothing new in the fact that medicinal firms and practitioners look to plants in their quest for novel compounds to fight disease (morphine, aspirin and digitalis being cases in point), but what has been especially characteristic of this more recent resurgence of what has come to be known as 'bio-prospecting' is the systematised role that traditional knowledge – as handed down or recorded through the generations – has come to play in the initial identification and/or screening of suitable plant leads when faced with an incredibly lush global bio-diversity.[96] More often than not, it has been patent-hunting multinational companies that have come

[94] It is this experience of addiction and depression, as shown in chapter 5, that clinicians have measured in clinical trials with Heantos and St. John's Wort.
[95] My sincere thanks to Chris Hamilton for helping me to develop my argument in this section.
[96] Of the world's 250,000 or so species of higher plants only 6% have been investigated for their biological activity (Heinrich, et al. 2004: 289).

under fire from accusations of "bio-piracy" and of "colonising life itself", whereby custodians of traditional knowledge are seen to have been cheated of rightful compensation for their imparted knowledge while companies profit from the monopolisation of an intellectual commons (see Parry 2004; Shiva 1997). However, we will see in the following how St. John's Wort and Heantos both provide interesting appendages to ongoing debates about the thin lines that currently separate bio-prospecting/piracy.

As we will recall from chapters 4 and 5, efforts to revitalise Vietnamese traditional medicine since the mid 1950s have first and foremost relied on a comprehensive mapping out effort that took herbalists, botanists and other scientists to the rural areas of Vietnam in an attempt to record the experiences and knowledge of traditional practitioners, which would otherwise be lost or at best benefit a very limited population. As such this was in many ways what the 19th century botanist John Harshberger would have called an ethno-botanic project – a "study of plants used by primitive and aboriginal people" (1896) – albeit very much stripped of Harshberger's outmoded evolutionary assumptions. To explain the launching of the Vietnamese government's national ethno-botanic programme, Minister of Health Pham Ngoc Thach argued that:

> the scorn of Western-trained physicians for traditional medicine derives from an erroneous conception of science and a profound ignorance of the results obtained by traditional medicine… I would like to draw attention to the extreme richness of the vegetal pharmacopoeia of traditional medicine. Naturally, one cannot experiment on all these vegetal varieties one after another. The age-old experience of the people and physicians of the traditional school comes into play here… There is a danger of letting this age-old knowledge of medicine disappear rapidly, because if we don't cultivate it those who practice it will have disappeared after ten or twenty years. (Pham 1965: 13-5)

In other words, this was not a national study of how "primitive" peoples used plants, rather it was a case of what in more recent times has come to be described as ethnopharmacology and ethnopharmacognosy. These latter two ethno-sciences concern the study of all "biologically active agents traditionally employed or observed by man" (Heinrich, et al. 2004: 52), and the study of those biologically active agents used specifically for medicinal purposes, respectively. What makes them 'ethno' sciences is their focus on culturally transmitted traditional knowledge not only as a matter of cultural heritage, but also as an important ally in the search for ecologically, industrially and/or medically relevant active compounds. This approach was of course also the one chosen by herbalist Tran Khuong

Đàn as he traversed Vietnam in the 1980s looking for possible leads that could help him in his efforts to develop a herbal remedy against addiction.

In the United Kingdom, on the other hand, as we saw earlier, the first attempts to collate knowledge about medicinally useful plants into a standard pharmacopoeia in the 1960s relied primarily on bibliographic reviews of existing documentation, such as the numerous herbals and botanic guides that had been published throughout the past few centuries. This has certainly been the case with a herb like St. John's Wort, with documentation of its medicinal use spanning two millennia.[97] Yet, notwithstanding the existence of relatively comprehensive medicinal plant documentation, some thirty years after the Vietnamese government had launched its ethno-pharmacological programme, a number of researchers from the Royal Botanical Gardens at Kew, the National Institute of Medical Herbalists, the Herb Society, the Chelsea Physic Garden and Neal's Yard Remedies joined forces to form an Ethnomedica research group in 1999, eventually launching a programme called "Remembered Remedies – Researching the Herbal Traditions of Britain". Their rationale for doing so was not unlike that of the Vietnamese government's:

> 150 years ago, Britain was still mainly a rural society. Lives and activities were defined by the seasons and everyone knew the names and uses of several common wayside plants. Within two generations of the industrial revolution most of the population had moved into cities. As people developed an urban lifestyle they lost contact with the land and their practical herbal traditions. Not just forgotten but no longer accessible – where was the nearest dandelion, dock, healing tree or stream for watercress?… The loss of local knowledge – be it about plants or anything else – is one of the side-effects of globalisation and rapidly changing societies. While this issue is recognised in the tropics, and is receiving a lot of attention from those concerned with development and the conservation of cultural and biological diversity, it is not the case here at home. The UK has long been industrialised and ranks among the most developed of regions. Yet studies have shown that fragments of knowledge passed down through a long oral tradition still exist among older people. Its value increases the more it is lost as time passes. (Ethnomedica 1999)

In the three-year period 2003-2006, over one thousand records of medicinal plant use gleaned from survey cards that had been distributed widely by a group of 13 researchers as

[97] In this connection it should be pointed out that although there has been a particular emphasis on ethno-botanic expeditions in Vietnam, there also exists extensive bibliographic documentation going back many centuries on the use of medicinal plants with countless treatises and texts, both specific to Vietnam but also concerning the teachings of Chinese medicine (see chapter 4). These texts have also played an important role in ongoing ethno-pharmacological efforts to organise and collate knowledge about Vietnam's *materia medica*.

well by the Kew gardens, were collated and organised, allowing researchers to produce a list of the top 15 most-mentioned plants. These included feverfew, dock, onion, sage and nettle. Importantly, bearing in mind the controversies over bio-prospecting/bio-piracy alluded to above, contributors of knowledge were asked to sign a consent form confirming that they were "happy for information I give to the project to be published… on the internet, so that it is available for posterity" (ibid.). Scientists at Kew gardens have also been able to use the information gathered as a means of screening potential plant candidates for further phytochemical research into therapeutically active compounds. For example, Professor Monique Simmonds of Kew gardens explains that "sage is a herb that has been connected with wisdom down the ages, and now for the first time we can see whether it really helps with cognitive ability, or memory" (cited in Revill 2005).

And so, in both the United Kingdom and in Vietnam ethno-sciences have been deployed as a specific means to document, organise and archive for posterity the kind of information about the medicinal uses of plants that is otherwise seen as at risk of being lost as yet another side effect of globalisation and modernisation processes. At the same time, it is fair to say that there has been a particular focus on traditional knowledge specifically concerning the medicinal *use* of plants in more rural areas of the two countries. Indeed, it is often the status and patentability of any resulting industrially or pharmaceutically useful products stemming from such ethno-knowledge that is at stake in debates about the ethics of bio-prospecting. How, with whom and to what extent any (usually financial) benefits that these products might bring in their wake should be shared and made available are some of the questions that are often raised. For example, should Heantos inventor Tran Khuong Đàn, co-author on a patent registered at the national patent office in Vietnam together with scientists at the Institute of Chemistry, who invested great personal sacrifice in the years that he spent developing his remedy, be obligated to share any benefits with the traditional practitioners he interacted with during his travels throughout Vietnam? Is this at all the way in which to pose the question? And who should benefit from any future pharmaceutical products that might arise thanks to knowledge collected from the Remembered Remedies programme? How about profits from the sale of St. John's Wort products, whose knowledge has enabled it? These are the kinds of complex debates about ownership, exploitation and commodification of traditional knowledge that the ethno-sciences have brought in their wake.

Heinrich et al. (2004) have argued that within these debates one should distinguish between bio-prospecting and ethnopharmacology as two distinct methodologies for the exploitation of traditional knowledge. The former, they suggest, focuses on the development of drugs by way of assay-screening large quantities of biogenic substances (often though not always identified with the help of traditional practitioners via ethno-scientist 'middle men') for any biological activities, with the objective of discovering new single-compound drugs for mainly industrialised markets. Companies such as Shaman Pharmaceuticals and Phytopharm as well as government-sponsored initiatives like Costa Rica's National Biodiversity Institute who partner with pharmaceutical companies, have been famous for using bio-prospecting as a kind of 'business model', and it is sometimes suggested that the pragmatic focus on a people's *use* of plants that the sub-discipline of ethno-botany pioneered in the early part of the 20th century has been particularly facilitating for this.[98] By employing what eventually came to be termed a "chemical prospecting", "biodiversity prospecting" or "bio-prospecting" approach, initiatives such as these argued that their competitive advantage came from the fact that they started not just from a random library of chemicals, but rather from extracts of plants with a "history of medicinal use", which gave them a head start in R&D endeavours to either isolate a single active compound to develop a prescription medicine or develop a standardised extract of the plant for commercial sale (see Reid and World Resources Institute 1993).

Already in the mid-20th century, however, this almost exclusive ethno-botanical focus on *use* was seen as having come at the neglect of a more rigorous anthropological understanding of the cognitive frameworks and local conditions within which these medicinal plants occupy particular symbolic and ecological functions. In a paper on 'The nature and scope of ethnobotany', Volney Jones (1941) argued that as a discipline it should be "concerned not only with uses of plants, but with the entire range of relations between primitive man and plant", which is to say not just economic and medical but also symbolic and cultural. These latter relations have of course been the primary domain of medical anthropologists throughout the 20th century and beyond, who on their part have recently been highlighted for a general and converse "lack [of] full engagement with phytomedical reality, and… acceptance that the healthcare practices of most people on the planet depend

[98] In recent years, many researchers have questioned the economic viability of bio-prospecting as a business model because of the "elusive value of traditional knowledge" (see Clapp and Crook 2002). Indeed Shaman Pharmaceuticals, founded in 1989 went bankrupt in 2001.

on plants and animals" (Ellen 2006: 10). As a result, what has been called for today is more of an inter-disciplinary ethno-science that is "first and foremost, the study of how people of all, and of any, cultural tradition interpret, conceptualize, represent, cope with, utilize, and generally manage their knowledge of those domains of environmental *experience* which encompass living organisms, and whose scientific study we demarcate as botany, zoology, and ecology" (ibid.: 2, my emphasis).

This is where Heinrich et al. argue that an ethnopharmacological approach to developing medicinally useful complex plant extracts for "local use" comes in, as it is an approach which they see as emphasising the "cultural meaning of resources and understanding of indigenous concepts about plant use and of the selection criteria for medicinal plants" (2004: 54). Moreover – and perhaps the revitalisation efforts in Vietnam that focused on developing herbal remedies particular to the health needs of rural populations would be taken as a case in point here – they also argue that rather than only look for patentable single-compound drug candidates, an ethno-pharmacological approach will often prioritise 'local solutions for local problems' as a matter of economic and practical feasibility and not necessarily of commercial viability. As argued by Health Minister Pham in 1965:

> Take for instance the medicinal plants. In the West, scientists abandon plants and resort to chemical synthesis. But what is the extract of a plant, if not a complex body, the product of complicated synthesis? Thus, we have either ready-made medicines or products from which we can make higher synthesis, a good part of which process has already been made by those living laboratories: the plants… [With] traditional medicine, we have at the same time clinical indications to choose the plants for experimentation, and the products of a total or partial synthesis. These are the real short cuts offered us by traditional medicine [and] we are working systematically in this direction. One of the great difficulties of poor countries is lack of medicines. We still have to import a number of products, because our pharmaceutical industry is not yet well developed. Nevertheless, from our experiments with traditional medicine, we have succeeded in preparing a great number of local products… We have even begun to export a number of pharmaceutical products extracted from our country's flora. (Pham 1965: 15)

And so, as we have seen in both the British and Vietnamese contexts, while a distinction between ethnopharmacology and bio-prospecting approaches might be tenable to some extent, they can and often do merge and blend into each other. Whatever the particularities of the strategies chosen, it is evident from recent efforts to recapture and exploit age-old traditions and experiences with medicinal plants in these two countries that ethno-sciences,

as a particularity of the 20th century, have played and continue to play a pivotal role in the development of their respective traditions of herbal medicine.

Disciplining living laboratories

Yet it is not only through an ethno-botanic taming of the countryside with the aid of field notes, databases and nomenclatures that the disciplining of herbal medicine is taking place. It is also increasingly taking place in chemistry laboratories filled with high-tech extraction apparatus, chromatographs and nuclear magnetic resonance spectroscopes. It is in these laboratories that the biomass plant samples collected and taxonomised by herbalists and ethno-scientists are subject to labour intensive phytochemical scrutiny – soaked in extraction solvents, percolated, centrifuged, filtered, dried, partitioned, separated, elucidated and finally characterised in their chemical multiplicities. It is a process which is not only necessary for subsequent pharmacological mechanism of action research, but is equally necessary for those regulatory efforts that seek to assure consumers, as best possible, that they can expect some kind of standardised quality, not to mention safety, of the industrialised herbal products they purchase. For, if there is one thing that is characteristic of phytochemistry, it is that it is a science of ranges that seeks to apply some kind of consistency to the notoriously inconsistent 'chemists' that plants have been shown to be.

Whatever disagreements herbalists and scientists may have over specific mechanisms of action as well as concepts used to account for these mechanisms, there is broad agreement that it is the chemicals found in a plant that have a therapeutically significant effect on the body's physiological functioning when ingested. There is also agreement that the amount and quality of chemicals found in an extract of a particular plant species is dependent on growing conditions (soil, climate, weather conditions, pesticide use), time of harvest (before or after flowering, early morning or evening), which part of the plant is used (flower, leaves, stem, bark), extraction processes (drying, grinding, boiling, solvent used), as well as storage conditions (humidity, light, temperature). And while all this can be complicated enough with a single-plant like St. John's Wort, it becomes even more complex when working with a thirteen-plant herbal remedy like Heantos. Plants may well be superb chemists, but the exploitation of the chemicals they produce is dependent on both the conditions in which they 'naturally' produce them and the expertise in extracting them from the plants into a form suitable for ingestion. And so while sustainable cultivation

practices are increasingly being developed with the aim of optimising growing conditions for medicinal plant species, phytochemistry has been harnessed in herbal medicine to help reduce batch-to-batch inconsistencies, by breaking plant or remedy extracts down into identifiable single chemical compounds that can be isolated, chemically characterised and thereby used as markers in the standardisation of herbal products. These optimised cultivation practices and standardised chemical markers, it is argued, can then replace a herbalist's traditional organoleptic evaluation of medicinal herbs (taste, smell, texture, appearance) when controlling for quality in industrially produced herbal medicinal products. The goal is to ensure "a consistent content of therapeutically active constituent(s)… irrespective of the year of harvest and the year of production" (Gaedcke and Steinhoff 2002: 16) by standardising production procedures.[99]

This of course means that in order to be able to standardise a herbal medicinal product according to a defined range of therapeutically active constituents, a manufacturer requires not only a clear understanding of *what* is to be standardised (i.e. which chemical compounds), but also an understanding of how to ensure more or less controlled *cultivation* and harvest, of appropriate *production methods* which will not damage or degrade chemical constituents excessively during extraction, and of acceptable *ranges* of constituent content in the final plant extract products. These are the specific problems related to the production of plant extract based products as opposed to single active compound drugs.

St. John's Wort is a single-plant remedy, even if very often used by herbalists in combination with other medicinal plants. Not only has it become one of the most clinically studied plants in the world, as we saw in chapter 5, it has also become one of the most phytochemically and pharmacologically studied plants in the past few decades. With a long history of documented medicinal use, St. John's Wort (or *hypericum perforatum*) has recently been described as a "prolific producer of secondary metabolites" (Müller 2005: 5). One of the first of these to have been isolated and characterised is the naphtodianthrone hypericin, a red pigment long known for secreting when the yellow flowers of St. John's Wort are squeezed by hand. It has also been found to be the culprit in causing hypericism (a

[99] As Gaedcke and Steinhoff (2002) point out, it should be underscored that in far from all herbal plants and remedies have therapeutically active constituents been pharmacologically identified. For these herbal medicinal products, 'standardisation' refers to the implementation of standardised Good Manufacturing Procedures which can ensure some kind of batch-to-batch consistency.

disease that leads to potentially lethal photosensitisation) in cattle who feed off of the plant, and as a result it has been described as defence agent of the plant. Perhaps not so surprisingly then, it was also hypericin that became one of the first lead candidates in the phytochemical search for active compounds that might explain its anti-depressant effects. But *hypericum perforatum* has since been found to contain many more classes of secondary metabolites including phloroglucinols (mainly hyperforin and adhyperforin), flavonoids (quercetin, rutin and hyperoside), biflavonoids (biapigenin), xanthones, proanthocyanidins (catechin), acid phenols (p-coumric, ferulic and caffeic acids) and essential oils (including 2-methyloctane, limonene and myrcene). To date, pharmacological studies have singled out hypericin, hyperforin, quercetin and rutin as candidate compounds when accounting for St. John's Wort's anti-depressant action.

As much as is now pharmacologically known about the active constituents and possible mechanisms of action which might account for any experienced anti-depressant effects, it remains very difficult to devise standardisation procedures for St. John's Wort products. To begin with, comparisons of the composition of eight key chemical constituents in different St. John's Wort plant specimens have shown variations of as much as 700% in individual constituent content measured in micrograms/flowers (Müller 2005: 16). And while the German Commission E monographs (published in the 1980s) recommend that products be standardised according to a range of hypericin content (0.2-1 mg of total hypericin per 2-4 g of herbal drug), more recent research has suggested that hyperforin is more prominent in generating anti-depressant pharmacologic action. Moreover, hyperforin has been shown to be so chemically unstable (due to a liability to oxidative degeneration) that standardisation according to hyperforin content requires very sophisticated and costly extraction techniques. With so many variables at play, it is little wonder that an *LA Times*-commissioned chemical analysis of 10 St. John's Wort brands from 1998 found considerable discrepancies between what was promised on labels in terms of hypericin content and what was found to be present in sample capsules (three brands contained no more than half the listed amount and four had less than 90% of the listed amount) (Monmaney 1998).

The challenge for standardising St. John's Wort then, has become one of balancing a need for suitable (preferably therapeutically relevant) biochemical markers that can ensure batch-to-batch consistency within an accepted range of marker constituents on the one hand, and

on the other to ensure that the entire spectrum of chemicals particular to St. John's Wort are present in any whole plant extract products made from it. Ensuring that a final herbal drug preparation contains a certain constituent within a defined content range, either by adding inert adjustment material (e.g. lactose) or blending extract (of the same plant), can ironically enough diminish the quality of the original or so-called 'native extract', and as a result, it is argued "the initial question prior to adjustment should always be, if it is considered more important to administer a sufficient quantity of native extract or a defined quantity of the constitutent(s) the extract is to be adjusted to" (Gaedcke and Steinhoff 2002: 17). The answer to this initial question is far from clear cut with pharmacologists probably inclined to favour the latter and herbalists the former. For example, herbalist Peter Conway argues that "most herbalists would rather use a St. John's Wort preparation that has a natural balance of constituents, achieved through good growing, harvesting and processing, over one that has unnaturally high amounts of one element, as in many standardised products" (2003: 21). Bearing in mind that 'natural' variation in this "natural balance of constituents" can be considerable, Conway does suggest that "it is possible to check the quality of herbal preparations and ensure that there are the right amounts of a broad spectrum of the desirable chemicals present in the product without artificially altering their relative amounts" (ibid.).[100] And so the problem remains of just how to define what is meant by the "right amounts", a task that invariably will require some kind of 'normal spectrum' marker profiles against which batches can be checked or 'quality controlled'.

As already mentioned, herbalists in both Vietnam and the United Kingdom have in the past relied extensively on organoleptic evaluations of quality, either as they gather their starting materials from the wild or upon purchasing them from commercial suppliers or at medicinal herb markets. However, as we saw in chapter 4, regulations in both countries are increasingly requiring laboratory-confirmed quality assurances for especially industrially produced herbal products, but also for starting materials. And it is in these practices of quality assurance that control profiles based on chromatographic 'fingerprints' have become crucial. By using thin layer (TLC), gas liquid (GLC) and high performance liquid (HPLC) chromatography methods, a plant extract can be broken down into its various chemical constituents, appearing as either bars on a TLC chromatogram or peaks on GLC and HPLC chromatograms. And just as the fingerprints from a crime scene can be checked

[100] Mills concurs arguing that "although there is variability, it is within workable limits, and quality control can reduce it even further" (1993: 262).

against a database of past suspects for a match, so too can the chromatograms from a new batch of herbal medicine extract be checked against constituent control 'profiles' to ensure a standard batch-to-batch consistency.[101] For, once chromatographically separated, chemical constituents can be phytochemically identified using nuclear magnetic resonance spectroscopy or mass spectrometry, which allow for three-dimensional structure elucidation of an individual molecule of the chemical constituent under scrutiny. The goal being to identify suitable marker compounds unique to the medicinal herb in question, which can then be used to build chemical reference profiles based on norms of purity and content.

It is also these isolated chemical constituents which can then be individually assayed for possible pharmacologic actions (something we will return to later in this chapter), and thereby classed into groups of either therapeutically active constituents (i.e. those "with known therapeutic activity"), active constituents (i.e. those "which contribute to therapeutic efficacy"), or marker substances (i.e. those "which, according to the state of scientific knowledge, do not contribute to therapeutic activity… [yet] are suitable for identification tests and assay (e.g. batch-to-batch control)") (Gaedcke and Steinhoff 2002: 22-3). Hence, the standardisation of St. John's Wort products today is carried out using not only quantitative content ranges for hypericin and/or hyperforin (expressed in terms of mg per daily dose) which have been identified as pharmaceutically relevant constituents, but also qualitative chromatographic standards which reflect an aim to ensure that an extract contains the plant's 'full spectrum' of constituents in relevant amounts.

Ethno-chemistry

Now, as we can see, the challenge of standardisation in the case of St. John's Wort has been a time-consuming, costly and technically sophisticated affair. So much so that one can only imagine the magnitude of such a task when presented with a mixed extract containing all of thirteen different plants, such as Heantos. When Tran Khuong Đàn approached the health authorities in Vietnam with his herbal mixture for the treatment of drug addicts, his remedy came in the form of a dark, rather earthy-tasting syrup, the result of a complex process of cutting, drying, boiling and mixing. As already highlighted, Đàn had spent many years learning from the experiences of fellow traditional practitioners, by travelling

[101] Recall that the Institute of Drug Quality Control in Vietnam has, over the years, built up a library of such 'profiles' against which they check the quality of 'raw material' plant samples collected from various medicinal herb markets (see chapter 4).

throughout the countryside collecting over one hundred home-made recipes for treating opium addiction in the 1980s. On the basis of this gathered 'ethno-knowledge' combined with information gleaned from classic medicinal texts (most of which were written in Chinese and Nôm[102]), Đàn began experimenting with various herb combinations and preparation methods. It was at this time, during the late 1980s, that Đàn decided to intentionally addict himself to opium in order to personally evaluate the different remedy batches. He would later argue that "the only way I could test my medication was to experience the torture of withdrawal for myself" (Tran 1999). And so, through a period of two years, Đàn would undergo a series of self-inflicted withdrawals, all the while experimenting on himself with the different mixtures he would devise. Đàn's final choice fell on a set of thirteen plants and a complex processing protocol which together would consistently produce a herbal remedy for treating addiction. As a complex mixture, Heantos would target each of the individual withdrawal symptoms common in addicts undergoing 'cold turkey', redress what Đàn has described as "the continuous shortage of drugs in the brain of the addict", and restore balance and health to the addicts (ibid.). It was using this home-brewed syrup that health officials in Vietnam carried out their first trials on the efficacy of Heantos in treating addiction in the early 1990s.[103]

Since 1995, however, as we saw in the previous chapter, Tran Khuong Đàn has donned a white laboratory coat in an interesting collaboration with some of Vietnam's top scientists at Hanoi's Institute of Chemistry, as part of an international effort to standardise and further develop Heantos. Whereas it was the botanists, ecologists and chemists who had been sent out to the Vietnamese countryside on ethno-scientific missions to liaise with traditional herbal practitioners in the past, in this collaboration, a traditional herbal practitioner has joined chemists in their laboratories, to assist them in their efforts to identify and characterise the chemical constituents that may be contributing to the therapeutic effects experienced by some of the by now 9,000 or so patients who have been treated with Heantos in Vietnam. To be sure, Đàn's presence in the laboratory has been far from cosmetic, rather his detailed knowledge of the medicinal properties of each of the plants in

[102] Nôm is a script developed around the 10th century by using and modifying Chinese characters to write Vietnamese.

[103] Because of an ongoing patent application process in Germany at the time of writing, I am not able to disclose the identity of the thirteen plants in question and I will therefore not be able to discuss the individual characteristics of these plants in the same way that I have with St. John's Wort. I will instead concentrate on the specific problems facing herbalists and chemists who work with standardisation of complex plant mixtures.

Heantos has been instrumental in the transformation of Heantos from its original syrup form into ‘standardised’ capsules. From the identification of the particular medicinal plant species to guidance on the best methods for extracting therapeutic constituents from these plants, Tran Khuong Đàn has worked closely with Professor Tran Van Sung over the past decade as a partner in the laboratory. The Institute of Chemistry has in turn, for reasons which will become clear, enlisted their long time partners at the Leibniz Institute of Plant Biochemistry in Halle, Germany, to help with ongoing efforts to chemically characterise Heantos, with the ultimate aim of accounting for its therapeutic action.

There have been a few key objectives in the further scientific development of Heantos since the mid 1990s. The first has been to transform Heantos into a stable, so-called ‘multiple pot’ herbal extract. That is to say, to take the first step towards standardisation by introducing reproducible extraction procedures, by building on Tran Khuong Đàn’s original, perhaps more crude, methods of extraction. This has been a complicated process which has, in turn, had a direct impact on ongoing clinical trials. In October 1997, the first results of the collaboration between Đàn and the Institute of Chemistry came in the form of the first batch of Heantos dry extract capsules. To make things more practicable, Đàn and Sung had agreed to divide the plants into three groups, each with a specific therapeutic function. Each of these three groups of plants was then processed into three individual dry extracts, which were subsequently manufactured into Heantos 1, Heantos 2 and Heantos 3 capsules. Importantly, this initial method of standardisation was based on therapeutic considerations as determined by Đàn. Heantos 1 and 2 were to be used in the first three to seven days to treat withdrawal during detoxification, the former to appease withdrawal symptoms and to reinvigorate the health of the addicts, and the latter as a sedative to help patients sleep as much as possible (insomnia is a well known withdrawal symptom). Heantos 3 could then be used for a subsequent two to three months, specifically with the therapeutic aim of keeping any cravings at bay and thereby prevent relapse, especially in cases where detoxified addicts might become re-exposed to the environments in which they had grown accustomed to using drugs.

Each of these three forms of Heantos were subsequently sent for pharmaceutical standards analysis at the Institute of Materia Medica, as well as for pharmacological and toxicological tests in mice and rabbits at the Institute of Drug Quality Control in April and September 1998 respectively (Vietnam. Institute of Chemistry. 1999). While Heantos 1 and 3 were

approved as living up to national safety and quality requirements, further toxicological tests were ordered by the scientific committee overseeing the re-evaluation of Heantos on the sedative Heantos 2 capsules, following concerns stemming from reports that it might be causing muscular spasms and convulsions in human patients. Although these further toxicological tests, which were completed in May 1999, suggested that Heantos 2 was far from lethal in the recommended dosages, the scientific committee decided to leave Heantos 2 out of clinical trials relating to the short-term efficacy of Heantos in treating withdrawal.[104] This happened in spite of the central role given by Tran Khuong Đàn to the sedative effects of Heantos 2 in the treatment of withdrawal.

The second main objective of the Institute of Chemistry's efforts to further scientifically develop Heantos has been to phytochemically characterise each of the thirteen plants included in the original herbal syrup, in much the same way that St. John's Wort has been. And seeing as this task is a technology-intensive affair (some of which is not available in Vietnam), the Institute of Chemistry called upon their long time partners at one of Europe's most advanced plant biochemistry institutes in Halle to assist them in this effort. In the period May 2000 to March 2006, Vietnamese and German chemists joined forces to characterise the chemical constituents found in each of Heantos' thirteen plants. Starting with literature reviews in Chinese, Vietnamese, as well as international bibliographic databases to map out existing studies on the plants in question, the scientists employed chromatographic methods (thin layer, middle pressure liquid and high pressure liquid chromatography) to isolate pure compounds from Heantos components, and then infrared, ultraviolet, mass, and nuclear magnetic resonance spectroscopy to structure-elucidate these compounds. The goal of these initial phytochemical efforts was "not to pursue the isolation of single bio-active principles and their synthesizing", but rather "to contribute to the optimisation of the efficacy of Heantos, to its development as a standardised product and to the scientific explanation of the effectiveness of a medication, which has its origin in traditional medicine" (Vietnam. Institute of Chemistry. 2001: 5-6).

These efforts were given renewed importance in 2001, when the German government required that the analytical techniques used for confirming the declared contents of Heantos be developed as a precondition for the clinical trials with Heantos that were due to take

[104] See Chapter 4 for a discussion of these trials.

place at the University of Essen. As a result, not only has the Institute of Plant Biochemistry assisted fellow Vietnamese chemists with their isolation and characterisation work, they have also embarked on an unprecedented effort to develop analytical techniques using nuclear magnetic resonance spectroscopy that would allow for the identification of all thirteen plants in what had now become a single final Heantos extract. A further outcome of the initial phytochemical analyses of the Heantos components has been a rethinking of the strategy of extraction that had initially been developed at the Institute of Chemistry in Hanoi to produce Heantos 1, 2 and 3 capsules. On the basis of the initial literature reviews and chemical characterisations of the Heantos plants, Tran Khuong Đàn and Tran Van Sung decided to re-group the plants for extraction, this time not in accordance with therapeutic aims, but rather according to the most prominent group of secondary metabolites found in each of the plants. In doing so, they argued that the amounts of extracted active ingredients could be enhanced as different types of constituents require different extraction methods to optimise yields. Using this new strategy of extraction, the thirteen plants[105] were again divided into three groups that were then submitted to three different extraction methods, using particular solvents, temperatures and extraction times for each group. The resulting mixtures were then evaporated into three different pastes or powders, which were mixed together before a final evaporation was carried out, resulting in a final 'multiple pot' powder extract. This was subsequently manufactured into what are now known as Heantos 4 capsules. As a result, therapeutic concerns have become more a matter of adjusted Heantos 4 dosage regimens during the course of treatment than of using different Heantos capsules at different stages (Tran 2004).

We will recall how complex it can be to develop 'fingerprint' control profiles which are faithful to the 'normal full spectrum' of constituents in a single plant like St. John's Wort. As put by Professor Ludger Wessjohann of the Institute of Plant Biochemistry, "analysing an extract which contains thirteen different plants is like being asked to identify an individual fingerprint from a single card which has had hundreds or even thousands of fingerprints messily jammed on top of each other" (Wessjohann 2005). A high pressure liquid chromatogram of a single-plant extract will often produce relatively sharp peaks indicating the presence of some of the more predominant metabolites in the plant, while a

[105] Importantly, since the plants of Heantos are not at this stage cultivated, the chemists rely on Tran Khuong Đàn's organoleptic evaluation of plant samples before carrying out standard analysis against existing control profiles.

similar chromatogram of a Heantos 4 extract gives a much smoother curve as all the different metabolite peaks 'hide' by blending and blurring into each other – an effect that a single bio-active compound approach seeks to avoid by breaking an extract down into the lowest possible chemical denominators and taking it from there. Nevertheless, as scientists in Germany and Vietnam have been committed to working towards a standardisation of the entire Heantos mixture, the Institute of Plant Biochemistry has had to enter uncharted territories in their efforts to develop analytical methods that would allow for the confirmation of the presence of all thirteen plants in a Heantos 4 extract in accordance with German national requirements.

Since it was much too early in late 2005 to form any conclusions about what might be the most important therapeutically active constituents, not to mention contributing active ingredients in Heantos, the Institute of Plant Biochemistry has instead focused on searching for unique marker substances from each plant which could be reproducibly identified in the final Heantos 4 extract as a means to confirm their presence in the extract. Chemists at the Institute of Drug Quality Control in Hanoi had already successfully identified six out of the thirteen plants by comparing high pressure liquid chromatographs of Heantos 4 extracts against control profiles of the thirteen plants, but HPLC data was not sufficiently detailed for identifying the remaining seven. This task would require submitting Heantos 4 extract to the kind of technology-intensive structure elucidation spectroscopy that is usually reserved for single compounds. Although the resulting data might be described in terms of a lot of 'noise' resulting from the thousands of compounds in Heantos 4 extracts, it nevertheless became possible to search for particular patterns in the resulting hydrogen atom spectrums, which might then be used to confirm the presence of previously identified unique marker substances from each of the plants in question.

Finally, the last key objective in the further scientific development of Heantos in both Vietnam and Germany over the past decade has been to prepare the ground for the bio-assay testing of the biological activity of the many compounds found in the Heantos 4 extract. For this assay testing, the Institute of Plant Biochemistry in Halle has enlisted a polymerase chain reaction-based gene expression profiling method trademarked by the German biotech company Biofrontera as "Digital Expression Pattern Display". This method has been specifically developed "for the purposes of elucidating pathology pathways of major brain diseases, of analysing the target profiles of drugs presently applied

or in development, and of identifying novel targets for drug action" (Maelicke and Lubbert 2002: 283). And as we will see in the following section, since addiction has increasingly come to be considered as a disease of the brain, such assays have become crucial for bio-scientific endeavours to identify 'plausible' mechanisms of action for the therapeutic effects experienced by patients treated with Heantos.

Restorative herbal tonics and the regulation of neurotransmission

A final key route for disciplining Vietnamese and British herbal medicine in recent decades has consisted of a search for pharmacologically plausible mechanisms of action. In the cases of Heantos and St. John's Wort this has entailed/entails a molecular mapping of the pharmacokinetic and pharmacodynamic pathways that individual chemical compounds follow as they are absorbed into and then disposed of by the body. It is this pharmacologic disciplining of herbal medicine that in particular is often characterised as a kind of scientific colonisation of herbal medicine which is gradually disrobing herbal medicine of its vitalist origins, especially when the language of meridians, energy flows and vital rhythms is discarded in favour of receptor regulation, neurotransmission and modulation. It is these differing 'languages of life' that are seen as incommensurable and consequently preventive of any kind of useful exchange between, for example, herbalists and pharmacologists. At its crudest, this incommensurability is seen as dividing a vitalism characteristic of TMCAM therapies from a mechanistic, rationalistic reductionism particular to modern medicine.

Herbalists Michael McIntyre and Simon Mills suggest that "the approaches of traditional herbalism and modern medicine are in stark contrast", and that while there are "underlying, often unwritten assumptions of the ancient ways of medicine [common to] every healing tradition the world over, whether American Indian, early European, Islamic Middle Eastern, or rooted in the Ayurvedic medicine of the Indian sub-continent or the richness of the Chinese and Japanese systems,… they seem… not to apply to one system: that of modern technological medicine" (McIntyre 1988: 41; Mills 1993: 9). From the *qi*-energy[106] of Chinese and Vietnamese medicine, the *prana* of Indian medicine, the *animal magnetism*

[106] See Kaptchuk for a discussion about the distinction between an all-pervasive Qi which is "not so much a force added to lifeless matter but… [defines] everything in the universe, inorganic and organic" and a more specific, engendering and activating form of Qi which "permeates the entire person … [and] is directly involved with a person's life", regulating and indeed allowing it (1983: 43-52).

of Mesmerism and the *vis medicatrix naturae* of western herbal medicine, the concept of a non-material 'life force' or *élan vital* has often been invoked to contrast what are characterised as vitalist as opposed to mechanist theories of life. What links this otherwise disparate range of life force conceptions, it is argued, is a shared idea of "an essential vital 'hum' that underpins all other living functions" (Mills 1993: 32). This 'hum' is considered essential for the possibility of life – its disruption causing illness, its discontinuation causing death.

But there are also important differences in the ways in which this vital force has been conceptualised. For example, in Vietnamese traditional medicine, *khí* and *huyết* are described as "the two vital principles" with *khí* (of the Yang principle) seen as a "driving force" that ensures the circulation of *huyết* or blood (which is of the Yin principle). Equilibrium is preserved by their unobstructed movement "the breaking of which will lead to disorder", an "imbalance in vital energy" and therefore illness (Hoàng, et al. 1999: 5-6). In British herbal medicine, *vis medicatrix naturae* (the body's own innate healing powers) has been described both in terms of a flowing "vital force" and a resonating "vital pulse", the disruption of which leads to illness. The distinction is important as while some ascribe to the concept of a life *force*, others distance themselves from its "recourse to the 'ghost in the machine'" preferring instead to conceptualise it as a vital *pulse*, a process of maintaining vital rhythms (McIntyre 1988; Mills 1993: 122). Notwithstanding these "subtle differences of interpretation", McIntyre goes as far as arguing that "regardless of training or tradition, the essential aim [of herbalists] is the same: to provide the patient with herbs that can re-establish or revive the harmonious flow of this universal life force, without which we die and which itself is the true healer" (1988: 42).

And so, while Chinese, Vietnamese, Indian, early European and Islamic Middle Eastern traditions of medicines are described as inherently commensurable in such accounts, they are all, in turn, described as fundamentally incommensurable with one particular system: modern medicine.[107] Yet there are two important ways in which contemporary herbal medicine in Vietnam and the United Kingdom has begun troubling this posited divide. Firstly, as already pointed out, it cannot be said that all herbalists ascribe to a single form of

[107] Not of course by all. It is interesting to note that when asked about his collaboration with a practitioner of traditional herbal medicine, Professor Tran Van Sung of the Institute of Chemistry in Hanoi argues that "I do not see any contradiction between physics and metaphysics" (cited in Impact 2000).

vitalism, employing a single coherent set of concepts as they account for the modes of action of their remedies. There is plenty of scope for eclectic and diverging accounts not just between herbal and modern medicine practitioners, but just as importantly within herbal medicine and biomedicine as numerous differing accounts vie for plausibility. And secondly, recent efforts to scientifically standardise and further develop St. John's Wort and Heantos would certainly suggest that whatever incommensurabilities are at stake there seems to be plenty of room for cooperation, even if conclusions are not shared at the end of these collaborations.

Tran Khuong Đàn has provided a complex account of the mode of action of Heantos in terms of a therapeutic restoration of the balance of Yin-Yang and the five basic elements in an addict's body using relevant medicinal plants: "it is by rebalancing Yin and Yang in the body and not by suppressing individual withdrawal symptoms that these symptoms will disappear of their own" (Tran 1999). At the same time, he has also described how, while developing Heantos, he chose particular plants for his remedy with the specific aim of addressing a "chronic lack of drugs in the brain" by normalising the regulation of endorphins in a detoxified addict (ibid.). Similarly, herbalist Andrew Chevallier has characterised St. John's Wort as a 'nervine', "having a restorative and tonic or relaxant effect on the… battered nervous and endocrine systems of people suffering from nervous exhaustion, depression, nerve damage, long-term emotional stress, anxiety, and the like", while also suggesting that it "markedly increases, to a significant degree, serotonin, noradrenaline and dopamine levels within the synapse, and seems to enhance the tranquilising activity of GABA and benzodiazepine – all of which are involved… in the onset or maintenance of depression" (1999: 91, 47). And herbalist Peter Conway argues that "to understand what St. John's Wort does exactly, we need first to have a basic understanding of the special chemicals (called neurotransmitters) that are involved in nervous system functions" (2003: 23).

Perhaps the by now very familiar anthropological argument that patients notoriously lack loyalty to any one particular coherent cognitive framework should be extended to practitioners as well. At any rate, what is clear from recent efforts to standardise and further develop Heantos and St. John's Wort is that the search for "plausible mechanisms of action" is currently taking place in German neuropharmacology laboratories. That is of course not to say that what some might describe as 'esoteric' explanations of a treatment's

action which are "not congruent with current scientific thought" (Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000: 4.31) – for example, ones which describe meridian-based pathways of Yin-Yang rebalancing, the vital nourishing of nervous systems or the maintaining of vital rhythms in the organs of the body – are dismissed by all, far from it. But neither does it suggest that a herbal practitioner who engages with the neurosciences does so at the betrayal of some kind of an epistemological authenticity. Rather what emerges, is an eclectic meeting of knowledges which are in turn picked up, modified, rectified and transformed. As we will see, to insist on fundamental incommensurability between modern and herbal medicine would make the task of describing two decades worth of efforts to further develop and improve St. John's Wort and Heantos arduous to say the least.

The first point to be made is that St. John's Wort and Heantos have become prominent as treatments against *depression* and *addiction* respectively, two famous DSM IV diagnostic classifications. This is not to say that they aren't also used by herbalists as restorative tonics against diagnoses of battered nervous systems or extreme yin,[108] but when these two remedies are consistently described and promoted as a "natural anti-depressant", "nature's Prozac" or a "traditional herbal treatment against addiction" by herbalists, clinicians and phytochemists alike, then they cannot help but engage with the current state of medical knowledge about these two particular conditions. And for all the singular, reductionist coherence that is often attributed to modern medicine, if there is one thing that has been characteristic of pharmacologic research into depression and addiction over the past century or so then it is surely not uniformity. Instead we find a number of constantly modified and often competing hypotheses about possible plausible mechanisms of action.

In a chapter on 'The Development of the Concept of Biological Regulation in the Eighteenth and Nineteenth Centuries', Canguilhem argues that "when embryologists discovered in the egg's blastomeres what they called 'total potentiality', by which they meant a capacity to influence the development of each part in keeping with the structure of

[108] For example, herbalist Andrew Chevallier is at pains to underline that "as a nervine, hypericum is usually prescribed with three or four other herbs that reflect the individual needs of a patient… From an holistic perspective, hypericum will 'earn its place' in a prescription for chronic ill health of almost any kind, even where nervous exhaustion or depression is not the main problem" (Chevallier 1999: 92). This is a point that is crucial for herbalists who more often than not engage in 'polypharmacy' (mixing of different herbs) in their prescribing practices.

the whole, they complemented and confirmed what physiologists already knew, namely, that there exist organic functions whose purpose is to control other functions and thus, by regulating certain invariants, to enable the organism to comport itself as a whole" (1988: 81-2). And although it was only in the late nineteenth century that these functions came to be known as "regulatory", Canguilhem shows how eighteenth century debates between Leibniz and supporters of Newton set the stage for the scientific investigation of a number of autocratic biological regulatory systems – respiratory, nervous, digestive, circulatory – in the ensuing centuries. For Newton and his followers God was not only the "Cause of motion, but also the Governor, Regulator and Methodizer of the same", whereas Leibniz saw this as a "curious opinion of God's work [a]ccording to [which] God needs to reset his watch occasionally". Leibniz, Canguilhem suggests, countered this view of God as both author and regulator of nature's laws, by proposing a cosmology *sans* theology, a universe that was "immutable, regulated by virtue of its original creation" (ibid.: 84-5). Consequently, the idea of a regulatory function built into the very laws of nature was taken up in 19th century physiology and biology, as the stubborn persistence of life in organisms in the face of external hazards came to be described in terms of an inherent biological tendency towards equilibrium or homeostasis via pathways of adaptation, compensation and stabilisation.

Today, in neuroscience, biological regulation has become a neurochemical affair involving axons, vesicles, neurotransmitters, neuromodulators, synapses, post-synaptic receptors and dendrites.[109] It has also become a genetic affair involving brain-derived neurotrophic factor genes, binding proteins, repressors and activators. And it is dysregulations or imbalances in these complex systems of neurotransmission and gene expression that in recent decades have come to be seen as underlying both depression and addiction. That is to say, whereas 'normal' regulation of neurotransmission and gene expression are associated with 'normal' states of unaffected mood and non-dependency, depression and addiction have since the 1960s been pharmacologically conceptualised as regulatory pathologies in systems of neurotransmission and gene expression. As a consequence, ongoing development of possible pharmacologic treatments for these two diagnostic conditions is for the most part a matter of identifying chemical compounds (molecules), which can assist in the normalisation of these regulatory pathologies by working on the molecular synaptic

[109] I am greatly indebted to Nikolas Rose and Scott Vrecko for sharing their insight into the neurochemistry of depression and addiction with me (see especially Rose 2000; Rose 2003; Vrecko 2006).

structures of the brain in a targeted way. In other words, pharmacologic treatments for depression and addiction aim to normalise pathologies in the brain's 'mood circuitry' and 'pleasure circuitry' respectively.

As Rose (2000) and Vrecko (2006) have shown, although the "cascade" of neurochemical hypotheses concerning the biological bases of affective disorders and addiction that have appeared in the past four decades remain contested and ambiguous at best, they have nevertheless brought about a particular 'style of thinking' that continues to guide pharmacologic and clinical investigations today, all of which have centred around biological dysregulations in neurochemical systems. If addiction can be thought of in terms of a dysregulation of the brain's endogenous neurochemical reward system (a hyperactive 'pleasure circuitry'), then it is by pharmacologically modulating this system that addiction can be treated. Similarly, if depression can be thought of in terms of dysregulations in monoamine or protein systems (deficiencies/excesses in levels of biogenic amines and proteins in the brain's 'mood circuitry') then it is by pharmacologically down- or upregulating these amines and proteins by manipulating their expression, secretion, breakdown, depletion and/or reuptake that depression can be treated (Rose 2000: 15).

Notwithstanding this neurochemical 'style of thinking', what any kind of review of available pharmacological research findings on addiction and depression treatments shows is that there is nothing even approaching some kind of clear 'biomedical' consensus when it comes to accounting for the biochemical aetiologies of depression and addiction. Rather, what one finds is a number of hypotheses, each highlighting particular possible pathways which sometimes overlap and sometimes appear to contradict each other. External factors such as biography, 'life events' and socio-economic circumstances have not disappeared in neurochemical accounts of these two conditions. Instead, the question has come to be posed in terms of how these external factors influence brain chemistry, e.g. how exposure to stress over long periods of time can atrophy the brain's hippocampus thereby decreasing the expression of brain-derived neurotrophic factor, or how an addict's exposure to drug-related stimuli (behaviours, places or sounds that the addict associates with drug use) gives rise to cravings by activating dopamine pathways (Vrecko 2006: 138). Nevertheless, with the rapid growth in marketing, prescription, use and media coverage of selective serotonin reuptake inhibitors (SSRIs) like Prozac and anti-craving medications like Naltrexone in recent decades, it is perhaps not too surprising that the 'serotonin hypothesis of depression'

and the 'dopamine hypothesis of addiction' have come to be taken as yet more instances of biomedicine's typically reductionist accounts of very complex conditions (see Healy 2004; Vrecko 2006).

Synergy

As already noted, the search for "plausible mechanisms of action" to account for the therapeutic effects of St. John's Wort and Heantos is currently taking place in German pharmacology laboratories. This being the case, it appears that 'plausibility' implies some kind of grounding in the aforementioned bio-psychiatric style of thinking, which has emphasised dysregulations in the brain's biogenic amine and protein systems as possible explanations for depression and addiction. That is to say, with some kind of efficacy having been established via clinical trials to date, hitherto vitalistic explanations of this efficacy, in terms of a nourishing of nervous systems or rebalancing of vital energies, are brought into a so-called "pre-clinical" pharmacological realm, where balancing and regulating refer to genes, neurochemicals, synapses and receptors. And while it might well be tempting to describe this in terms of a 'colonisation' of herbal medicine by biomedicine, as we will see, such an account would miss out on the numerous interactions between the two medical traditions that, for example, have resulted in scientists resisting the classic 'single compound' approach that pharmacologists are often charged with blindly following.

In an article reviewing ten years worth of pharmacologic research into the mechanisms of action of St. John's Wort in the treatment of depression, Butterweck (2003: 558) concludes:

> Herbal medicines are complex mixtures of more than one active ingredient. Therefore, pharmacological work is complicated by the fact that active compounds are often unknown. Further, synergistic or antagonistic effects of the different compounds cannot be excluded… Today, several compounds from different structural groups and with different mechanisms of action seem to be responsible for the observed antidepressant efficacy of St. John's Wort. Based on recent research, it seems likely that flavonoids, hyperforins and hypericins contribute to the antidepressant efficacy… [Yet] the mechanism of action of the plant is still not fully understood. Our understanding of the mode of action of St. John's Wort is complicated by the fact that the molecular basis of depression itself is still unclear.

And so, it is amidst this complex of chemical compounds, their synergistic and antagonistic interactions, and their separate yet supplementing pathways of pharmacologic action that scientific plausibility for St. John's Wort's efficacy in treating a complex condition like

depression has been sought after with the help of *in vitro* receptor binding assays on the compounds found in St. John's Wort extract, *ex vivo* studies of rat brains following chronic administration of St. John's Wort, and *in vivo* efficacy studies using animal models of depression. The very first pharmacologic investigations from the early 1980s (Suzuki, et al. 1984; 1981) had unsurprisingly focussed on one of the plant's most conspicuous chemical constituents, mistakenly attributing hypericin (rather than the whole plant extract) monoamine oxidase inhibiting properties.[110] Butterweck et al. (1998) have argued that hypericin does nevertheless generate anti-depressant activity, but, interestingly, seems to require the services of procyanidins (also present in whole plant St. John's Wort extract) in increasing its water solubility and thereby its bioavailability. Most recently, hyperforin (a phloroglucinol unique to hypericum) has emerged as another prime candidate when accounting for the therapeutic efficacy of St. John's Wort, this time as an inhibitor of the synaptosomal reuptake of neurotransmitters (Chatterjee, et al. 1998; Müller, et al. 1998). Pharmacologic studies of hyperforin have suggested that St. John's Wort is a broad spectrum reuptake inhibitor of not only serotonin and noradrenaline but also dopamine, GABA and L-glutamate. The precise mechanism of inhibition is yet to be established conclusively, but studies suggest that inhibition is noncompetitive – i.e. St. John's Wort "does not inhibit neurotransmitter uptake via direct interaction with the specific binding sites of the neurotransmitter transporter molecules" (Müller 2005: 38). Instead, the inhibitory mechanism of St. John's Wort has been hypothesised in terms of its elevation of intracellular sodium concentration, which in turn reduces the drive for neurotransmitter accumulation within the cell. Studies have also suggested that St. John's Wort extract might reduce stress-induced increases in gene transcription as another possible mechanism of anti-depressant action.

Experimental animal models of depression have also played a central role in St. John's Wort mechanism-of-action research including the tail suspension test (TST), the forced swimming test (FST), the chronic mild stress (CMS), the escape deficit test (ED), the stress disruption of Vanilla-sugar sustained Appetitive Behaviour (VAB), the elevated plus-maze, the behavioural despair test and the conditioned-avoidance response test. These models

[110] It has been suggested that the hypericin samples used by Suzuki et al. were not 'pure', but contained at least 20% of other constituents, notably flavonoids, which would explain why subsequent experiments have confirmed monoamine oxidase inhibiting properties of full plant extracts but not of purified hypericin (Butterweck 2003: 541-44).

seek to artificially recreate a "stressful, inescapable (and unpredictable in the CMS) situation that has been interpreted as inducing a state of behavioural despair, akin to the hopelessness of depressive patients" (Müller 2005: 60). A review of how St. John's Wort extract has performed against these preclinical templates of depression has suggested that it produces antidepressant like activities, facilitates learning ability and memory consolidation, produces anxiolytic effects, reduces alcohol intake as well as appeases nicotine withdrawal (Müller 2005: 93).

Tying up the major results to come out of this flurry of research, a number of reviews of the pharmacology of St. John's Wort have been published in the past couple of years. And although one might well have expected these reviews to pinpoint a single compound as responsible for its efficacy as an antidepressant treatment, conclusions seem instead to point towards a "synergistic" effect where multiple compounds act along multiple pathways with multiple targets contributing to a combined efficacy (Butterweck 2003: 554; Müller 2005: 26, 81).[111] Interestingly, it is also hypothesised that it is this synergistic combined effect that accounts for St. John's Wort's favourable safety profile (in comparison with standard antidepressant treatments), as, rather than exhibiting a single highly potent antidepressant activity, St. John's Wort extract exhibits multiple lower potency antidepressant activities that when combined, it is argued, can match standard antidepressants in efficacy while sparing the patient from side effects. Nevertheless, it is important to underscore that 'synergy' between the various active compounds found in St. John's Wort is understood in different ways in the pharmacological literature. On the one hand, synergistic effect is described as a strictly "additive" (Butterweck 2003: 554) sense whereby "various relatively weak effects result in the overall pharmacological effect" (Gobbi and Mennini 2005: 26), while on the other, it is suggested that "the pharmacological effects of the single constituents differ when given alone or in combination with other constituents, indicating that the extract is *more* than the sum of the single compounds" (Noldner 2005: 81). This latter view is congruent with that found in many texts by herbal practitioners who suggest that "the whole plant is much more than the sum of its parts" (Chevallier 1999: 17; McIntyre 1988: 53; Mills 1993: 263). Whatever the understanding of 'synergy', what pharmacological efforts to account for the pathways of action of St. John's

[111] While pharmacologic investigations into the active ingredients of Heantos has only just begun and it is difficult therefore to say anything specific about the pharmacology of Heantos, as we saw earlier, scientists have so far rejected pursuing a 'single compound' approach.

Wort have shown is that it is an over-simplification at best to suggest that all pharmacologists insist on breaking down plant extracts "by isolating and synthesising the [single] active principles of herbs to use as drugs" (McIntyre 1988: 53). Just as Watt and Wood (1988) have argued that there is no monopoly on holism in a clinical context, we might say that neither is there one in a preclinical context.

Conclusion

It is interesting to note that the House of Lords Select Committee on Science and Technology ended up taking Professor Tom Meade's evidence with which I started this chapter to heart. In summing up their position on debates about efficacy in the field of complementary and alternative medicine, the Select Committee accentuated the clinical/ preclinical split that I have suggested has been characteristic of research into both Heantos and St. John's Wort: "Any medicine with credible, accepted evidence for efficacy should be available, whatever the controversy over its underlying mechanisms… [i]t is our opinion that mechanisms of action are of secondary importance to efficacy, a view shared by National Institute of Clinical Excellence" (Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000: 4.40). The irony of this position, of course, is that there is probably just as much controversy surrounding evidence of efficacy as there is around evidence of underlying mechanisms of action. Yet, at the same time, the Select Committee's position makes space for what seems to be a standard state of affairs in mechanism of action research – whether traditional, alternative or modern – namely the persistence of numerous hypotheses as to possible plausible pathways.

What I hope to have shown in this chapter is that insisting on fundamental incommensurability would make the task of accounting for the emergence of Heantos and St. John's Wort as two herbal treatments for addiction and depression respectively in the 1990s almost impossible. At best, one would have to conclude that Heantos and St. John's Wort are but the latest casualties of modernity's incessant drive to rationalise, commodify, industrialise and colonise 'nature'. What I have described as the disciplining of herbal medicine would no doubt be read by some as nothing short of such a 'scientific colonisation', an erosion of tradition – 'if there has been a revival or renaissance of herbal medicine in Vietnam and the United Kingdom, then it has come at the dear cost of a lost

authenticity, legitimacy and epistemology'.[112] If this is the case, then how should we understand the efforts of Vietnamese health officials, doctors, scientists and traditional practitioners alike to "build our own medicine", the decision by Tran Khuong Đàn to don a white lab coat, or the clinical trials currently being carried out to test the efficacy of different traditional remedies in Hanoi and Ho Chi Minh City? And how should we read the literature on St. John's Wort by British herbalists which easily incorporates both neuropharmacologic findings and vitalistic concepts into accounts of the efficacy of this plant in the treatment of mood disorders? Have they all been co-opted, forced to 'sell out' in the face of market pressures or foreign donor 'interests'? And are St. John's Wort and Heantos all the worse for it?

Whatever the verdict, what I have shown in this chapter is that, notwithstanding the antagonisms that clearly do divide herbal medicine and modern medicine, there does seem to be some kind of common ground at stake – how to account for, consistently ensure and even improve the efficacy of St. John's Wort and Heantos. This is not to say that there has been full agreement on these central problems, this much should be clear from the foregoing analysis. Yet, just as there can be disagreement between herbal and modern medicine practitioners, so too can there be diverging hypotheses amongst herbal practitioners or between pharmacologists. Moreover, just as pharmacological concepts of biological regulation have informed accounts of the efficacy of herbal medicines, so too have herbal concepts of 'synergy' or 'polypharmacy' informed possible routes of pharmacological investigation. The importance of producing full spectrum extracts of St. John's Wort, as well as sticking to a multiple pot extract of Heantos (rather than breaking Heantos down into each of its plants), has been underscored rather than undermined in German and Vietnamese pharmacology and chemistry laboratories.

As we have seen then, the search for plausible mechanisms of action relies on an assemblage of concepts, objects and norms which taken together can account for the workings of life. It is a domain where a politics of 'life itself' circulates as pharmacologists, herbalists, phytochemists, neuroscientists and clinicians attempt to identify its mechanisms and understand its workings, so as to be able to attend to its pathologies in the form of dysregulations, disruptions, blockages or breakdowns. Moreover, it is a domain

[112] See Janes (1999) for a rigorous demonstration of this argument in the Tibetan context.

characterised by multiple hypotheses about these mechanisms, some of them characterised as vitalistic and holistic and others as mechanist and reductionist, all of which insist on a plausibility of their own. Yet, in mapping out the routes to prominence that St. John's Wort and Heantos have followed in the past two decades, it is clear that neuropharmacological pathways have featured prominently in media accounts, marketing information and also self help literature, although we will be seeing in the next chapter how vitalistic accounts of the workings of herbal remedies in terms of 'renourishing nervous systems' or 'rebalancing Yin and Yang' remain in full circulation in these same accounts. In the following and final chapter of analysis, I will turn my attention to a much more recent debate concerning a kind of neo-vitalism which, as we will see, is linked not to a politics of 'life itself', but rather to a politics of 'human subjectivity itself'.

7 Petty engineers of modern life

> Today we are concerned with a different kind of hazard that lurks in our environment – a hazard we ourselves have introduced into our world as our modern way of life has evolved. The new environmental health problems are multiple – created by radiation in all its forms, born of the never-ending stream of chemicals of which pesticides are a part, chemicals now pervading the world in which we live, acting upon us directly and indirectly, separately and collectively… [This] 'sea of carcinogens'… casts a shadow that is no less ominous because it is formless and obscure, no less frightening because it is simply impossible to predict the effects of lifetime exposure to chemical and physical agents that are not part of the biological experience of man.
>
> *Silent Spring*, Rachel Carson, 1962

> World medicine has made great progress in the last few years and our doctors have been longing to have the most modern methods in treating the sick. This is a legitimate desire, but I must admit that our efforts have not concentrated on this aspect… Western medicine remains powerless before many diseases while certain treatments not yet accepted officially have proved to be efficacious.
>
> *Minister of Health in Vietnam*, Pham Ngoc Thach, 1965

> The true miracle of modern medicine is diabolical. It consists in making not only individuals but whole populations survive on inhumanly low levels of personal health. Medical nemesis is the negative feedback of a social organization that set out to improve and equalize the opportunity for each man to cope in autonomy and ended by destroying it… turn[ing] people into unfeeling spectators of their own decaying selves.
>
> *Limits to Medicine*, Ivan Illich, 1976

> The newly emerging social problems [arising from] industrialization and modernization such as environmental pollution, social evils and changes in lifestyles… are exerting an adverse impact on people's health; income differences among the people are posing big challenges to the assurance of equity in diagnosis and treatment of diseases; the seamy side of a market economy involves the risk of eroding the noble ethics of the physician.
>
> *Resolution on the protection, care and promotion of people's health in the new situation*, Communist Party of Vietnam, 2005

If life expectancy and population statistics in Vietnam and the United Kingdom are anything to go by, then it cannot be said that 'a modern way of life' is killing people in any kind of general sense. By most estimates, the vast majority in these two countries have experienced dramatic advances in longevity over the past century or so. At the beginning of

the 20th century, a child born in the United Kingdom had an estimated average life expectancy of about 47 years compared to about 77 for a child born today – "people are living longer than ever before" (Great Britain. Department of Health. 2004: 9). In Vietnam, the estimated longevity leap has been from around 35 to 70 and "[a]lthough the country is among the poorest in the world, its vital health indicators are comparable to those of middle-income countries" (WHO 2003: 2). Both countries have seen their populations explode in this same period, from 38 to 60 million in the UK and 16 to 80 million in Vietnam. While such numbers certainly disregard the impoverished misery of millions,[113] and there is much debate over just what factors can be said to account for these advances (public hygiene, modern medicine, traditional medicine, nutrition, vaccination, urban planning or the treatment of water and sewage), it seems that over the course of the 19th and 20th centuries the life mechanisms of Vietnamese and British individuals and populations came to be worked upon, protected and perhaps even enhanced in ways that have allowed for increasingly longer lives.

At the same time, as discussed in the introduction to this dissertation, by the middle of the 20th century, doubts were regularly being voiced as to whether processes of industrialisation, technologisation, bureaucratisation and rationalisation were in fact exerting a purely positive influence on peaceful life. Notwithstanding measurable advances in a range of life indicators (death rates, infant mortality rates, maternal mortality rates, life expectancy), it seemed that this newfound longevity had come at a cost. In becoming mundane, modern living, it was argued, had spawned a range of debilitating side effects in the form of a dehumanising alienation and an enfeeblement of the body's biological life mechanisms via pollution and toxins. Even if the optimisation of biological processes was allowing people in countries like the UK and Vietnam to live *longer*, they were at the same time being zombified into "unfeeling spectators of [their] own decaying selves", marooned in "states of unthinkable backwardness", and left exposed in "unbreathable air, polluted streams" and a growing chemical "sea of carcinogens [as]… toxic materials become lodged in all the fatty tissues of the body", while also subjected to the painfully "addictive, mutilating and mutagenic" side effects of modern pharmaceuticals (Carson 1962: 213, 170;

[113] For example, the Vietnamese Ministry of Health has estimated average life expectancy in the rural province of Lai Chau at 63 years compared to 75.7 in the capital Hanoi, while in the UK people born in Glasgow city can expect to live to 69.3 years compared to 80.8 years in East Dorset (Great Britain. National Statistics. 2005; NCSSH 2001). Health inequalities are a major public health issue in both countries.

Galbraith 1958: 192, 194; Illich 1976: 154, 28; Nguyen, et al. 1965: 3). These were, as Armstrong and Caldwell have put it, the "dilemmas of social progress" (2004: 362). Dilemmas that were also highlighted in 1965 by Vietnam's Health Minister who argued that "although we still have to solve many problems related to under development, we are already beginning to cope with problems arising in a modern society" (Pham 1965: 21). In these kinds of modernisation critiques it was not so much that modern living was killing people off – although this argument certainly continues to be put forward in situations where pollutants and toxins are directly or indirectly held responsible for human fatalities, where lifestyles are charged with retarding a nation's life expectancy advances, as well as in terms of a looming ecological threat to man's future on this planet – rather what emerged out of these various critiques was a new component of life, which it was argued had been hitherto neglected by a 'cold' and reductionist modernisation: our 'quality of life'.[114]

This chapter is about the concept of 'life', more specifically about how different understandings of it have come into circulation in contemporary efforts to heal with herbs in Vietnam and the United Kingdom. In recent years, late 20th century developments within the life sciences, especially biotechnology, have led a number of social theorists to look at how what Foucault (1978) termed 'bio-power' is currently being refigured by so-called frontier technologies such as genetics, tissue engineering, neuroscience or cloning, as they remake 'life itself' through technique thus making it 'artificial' (see Franklin, et al. 2000; Rabinow 1999; Rabinow and Rose 2006; Rose 2001; Shiva 1997). While this work has generated considerable insight into the transformations that these developments are making possible, an almost exclusive focus on the frontier technologies of biomedicine and biotechnology has come at the cost of other accounts of what life is and how it works, however subjugated or scientifically discredited. The 'politics of life itself' in Vietnam and the United Kingdom is not somehow exclusive to the different expert forms of knowledge that are loosely referred to as the bio-sciences, rather as I will show, socio-economic, epidemiological as well vitalistic problematisations of what life itself is and how it might be optimised are equally relevant.

Secondly, I will also argue that the series of alienation and life-enfeeblement critiques of modernisation processes that I have described in the foregoing chapters have provided

[114] For illuminating discussions concerning the origins of the concept of 'quality of life' in both a social and a medical context see Armstong and Caldwell (2004), Basu (2004) and Wood-Dauphinee (1999).

conditions for a kind of *neo-vitalistic reconfiguring of modern life*. That is to say, not only has bio-power created conditions in which it becomes possible to discipline, optimise the capacities of, and extort the forces of (and more recently also to enhance) biological bodies and populations. It has also allowed for these same tasks to be performed on *human subjectivities* as part of overall life-administering operations aiming to optimise *both* longevity (understood as corporeal life) and 'quality of life' (understood as the ways in which individuals experience, cope with, take advantage of and enjoy their corporeal lives) in Vietnam and the UK (cf. Armstrong 2002; Armstrong and Caldwell 2004). In this way, 'life itself' and 'human subjectivity itself'[115] have become equally crucial objects of bio-power in these two countries today, whether operating through herbal or modern medicine health interventions. Just as a politics of life itself has during the course of the past few centuries brought "life and its mechanisms into the realm of explicit calculations… ma[king] knowledge-power an agent of transformation of human life" (Foucault 1978: 143), I will argue so too has a politics of human subjectivity itself brought subjectivity and its mechanisms into a realm of explicit calculations through hitherto unprecedented psychological,[116] sociological, and anthropological efforts to map these subjectivities out in both their individual and collective forms.

Thirdly, I will demonstrate how it is exactly in the intersections between life itself and human subjectivity itself – between longevity and quality of life – that we can locate the recent revival and renaissance of herbal medicine use in both Vietnam and the UK.[117] In the latter half of this chapter I will show how herbal medicine *use* has come to be problematised and acted upon in very different ways in the two countries under scrutiny

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[115] The distinction between 'life itself' and 'human subjectivity itself' I owe in part to Szerszynski, although his use of it pertains to a discussion about a 'postmodern form of sacrality' which he suggests is characterised by a "plurality of meanings grounded in individual subjectivities" (2005: 82). For Szerszynski, human subjectivity itself should be understood as "internal capacities for creating meaning and coherence" (ibid.: 172). I suggest that this is but one possible understanding of human subjectivity, an understanding that relies heavily on the anthropological concept of symbolic efficacy.

[116] For empirical accounts of how the psy-sciences have contributed to the mapping out of individual psy-universes, making them both amenable and available to technical interventions to improve mental aptitudes, discipline, skills and concentration in the UK see especially Rose (1996b; 1999).

[117] In this connection we should note that it has been pointed out that today: "a growing number of medical technologies are employed to improve the looks, performance, and psychological well-being of people who are healthy. Over the past decade or two we have seen the development of Paxil for shyness, Rogaine for baldness, Viagra for impotence, Provigil for sleepiness, Adderall for poor concentration, Meridia for excess weight, Botox for wrinkled faces, Humatrope for short stature and Sarafem for premenstrual discomfort" (Elliot 2005). Neuropharmacology is another obvious site in which the politics of life itself and human subjectivity itself converge (see Rose 2003; Vrecko 2006), just as has been the case with the placebo effect (see chapter 5).

here. While there has been a focus on empowering individual herbal users into taking care of their selves as responsible health consumers in the United Kingdom, the comprehensive mobilisation of Vietnamese herbal medicine has been as much a strategy of *national* cultural revival as a programme of individual or public health promotion. Importantly, I will argue that sociological and anthropological styles of reasoning have permeated these efforts as it is not only the vital capacities of Vietnamese and British bodies that are targeted by herbal remedies, it is also the coping skills, self esteem, cognitive frameworks, awareness and human capabilities – all components of human subjectivities – of herbal medicine users that are simultaneously targeted. That is to say, following Rose (1996b: 86-7), I will argue that just as psychology has been a 'generous' discipline allowing "psychological ways of thinking and acting… to infuse the practices of other social actors such as doctors, social workers, managers, nurses, even accountants", so too have sociological and anthropological ways of thinking and acting. As disciplines, sociology and anthropology have actively contributed to the making up and managing of 'whole person' subjectivities. And, in both countries, I will show how herbal medicine has, in very different ways, been harnessed to counteract some of the many damaging effects on human subjectivities that have been attributed to modernity.

Modernisation, epidemiologic transition and disrupted vital energy flows

In the UK, 21st century bio-politics has importantly come to be framed in the context of what a recent Public Health White Paper highlighted as a 20th century transition from infectious to chronic diseases as the main causes of death; a move into what Omran (1971) called the 'Age of Degenerative and Man-Made Diseases'. As a result, it is argued in the White Paper that since "the big infectious killer diseases have [now] been eradicated or largely controlled" mortality and morbidity in the UK have instead come to be inseparably linked to "lifestyle" (Great Britain. Department of Health. 2004: 6). If people are living longer than ever before then, as Porter has put it, there is "more time for illness, and… greater effort and resources will need to be devoted to keeping well" (1999: 710). In Vietnam, while health authorities are keen to highlight that today "most of the general health indicators of our country surpass other countries with the same per capita income" (Vietnam. Communist Party of Vietnam. 2005), they also concede that the nation is currently in the middle of an epidemiologic transition and that "the health system... has not adapted itself to [these] changes in disease patterns" (Vietnam. Ministry of Health. 2001). On the one hand, Vietnam continues to struggle with what the WHO has called "an

unfinished agenda in infectious, vector-borne and communicable diseases" (2003: 3) including cholera, typhoid, dengue fever, malaria, plague, hepatitis B and encephalitis, while on the other they are coming to terms with "the adverse impact on health due to changes in lifestyles, environments and working conditions in the processes of industrialization and modernization" (Vietnam. Communist Party of Vietnam. 2005: II.1). According to the Ministry of Health, Vietnam is moving towards a new age of disease patterns, where the major problems will be "non-infectious diseases like cardiovascular diseases, cancer, accidents and injuries, diabetes, occupational diseases, mental diseases, poisoning, suicide and diseases caused by unhealthy lifestyles (drug addiction, alcoholism, obesity, etc.)" (Vietnam. Ministry of Health. 2001: 1b).

Now, it is of course no coincidence that the revivals of herbal medicine in the United Kingdom and Vietnam are often explained with specific reference to this ongoing epidemiologic transition into an age of chronic disease and lifestyle-related illnesses. It is precisely in these areas that many herbal practitioners suggest a renewed relevance for their "holistic" and "less aggressive" remedies and treatments when compared to what are seen as the reductionist, toxic or symptom-busting biomedical treatments prescribed by biomedical GPs. Stress, indigestion, allergies, depression, addiction, obesity, cancer, musculoskeletal disorders and cardiovascular troubles are the epidemiological scourges of 'a modern way of life'. And their perceived perniciousness stems not just from potential mortality, but equally significantly from what is seen as their negative impact on a person's quality of life while he or she is experiencing or suffering from them. However much longer we might be living, herbalist Andrew Chevallier argues that "in our time, with ever-growing levels of emotional and mental stress, related perhaps to the breakdown of extended family and community ties, and to environmental pollution and degradation, people more and more need remedies that can support tired or 'burnt-out' nervous systems" (1999: 91). Fellow herbalist Michael McIntyre argues that "allergies seem to be on the increase… probably due to the many artificial chemical additives in commercial foods, as well as agricultural sprays" (1988: 90). Also Jonathan Zuess, in a St. John's Wort self-help guide, suggests that "our minds, bodies and spirits can't always adjust to the stressful and toxic lifestyles that we've come to consider normal in the late twentieth century" (1997: 13). Herbalist Simon Mills sums up the main argument:

> Life expectancy has never been higher. Yet in spite of these advances, it is also accepted that diseases still exact their toll on us. We might live longer, but the arthritic deterioration, heart disease, cancer and pneumonia that are most likely to plague our final years increase accordingly and still elide isolation and elimination. Bacterial diseases may be largely gone but low-grade debilitating viral and immuno-deficient conditions are on the increase. And patient after patient turns away from their doctors and goes towards practitioners of alternative therapies because they say that the priest of rationalist scientific medicine either is no longer effective or does not even seem to be able to understand their story any more… [Herbalism's] renaissance in the modern world points to its filling a new need in its consumers… [but it] will never have a future unless it comes to terms with changes in medicine in the last century and provides its own coherent and credible perspective on them. (Mills 1993: 17)

In Vietnam, multiple public health objectives in a recent national health programme reflect the persistence of different stages of disease patterns within the country, where people suffer from both infectious and lifestyle-related diseases. According to the Communist Party of Vietnam, the manifold goals of the government's health programme are "to reduce morbidity and mortality, promote health and increase life expectancy, improve the quality of our race [and] contribute to improving the quality of life… in response to the needs of industrialization, modernization, nation-building and defence" (Vietnam. Communist Party of Vietnam. 2005: I.2). We will recall from chapter 4 that such a diversified approach has been very relevant in national efforts to revitalise the practice and use of traditional herbal medicine. The "Doctor at Home" and "Drugs at Home" programmes, for example, have specifically targeted rural areas by promoting the cultivation of medicinal plants and home production of herbal remedies which are pertinent to the epidemiologic needs of Vietnam's rural populations (e.g. anti-dysentery, anti-infection and anti-tussive remedies). In more affluent, urban areas on the other hand, industrialised herbal remedies are produced and sold to cater for the specific epidemiologic make up of urban populations with vitality tonics making up the great majority of industrialised herbal remedies on the market (Bui 2004). Moreover, the National Hospital of Traditional Medicine in Hanoi has a number of departments dedicated to treating chronic disease and lifestyle illnesses, such as their Department of Acupuncture and Vitality Preservation, Drug Dependence Control Centre and Department of Geriatrics.

Heantos itself, one of many industrialised herbal remedies against drug addiction launched in the 1990s (others include Hufusa and Cedemex), was developed to treat an affliction considered a "social evil" in Vietnam (together with prostitution and gambling). Their

increasing prevalence is linked by health authorities directly to unhealthy lifestyles brought about by modernisation and urbanisation.[118] As summarised by the Communist Party in Vietnam: "newly emerging social problems such as environmental pollution and social evils are exerting an adverse impact on people's health;… the population size of our country will continue to grow in the coming years, and people's healthcare needs will be higher and more diversified" (Vietnam. Communist Party of Vietnam. 2005). And so, building up a "specifically Vietnamese medicine" (Huu and Borton 2003: 13) pertains not only to combining modern and traditional medicine, but also to addressing the epidemiological diversity found within Vietnam's borders.

Interestingly, in both countries, a kind of division of competences between modern and herbal medicine has begun to take form. Although the National Institute of Medical Herbalists in the United Kingdom stakes a strong claim for herbal medicine in treating "almost any condition that patients might take to their doctor", they also emphasise that "qualified herbalists know when a condition is best seen by a doctor or another therapist" (NIMH 2004b). And herbalists Mills and McIntyre both argue that "modern patients with a life-threatening pathology are in much better hands with a modern physician than they could have been with any from earlier generations" and that "the value of modern medicine in coping with acute or life-threatening disease is plain to see" (McIntyre 1988: 30; Mills 1993: 20). Similarly, in Vietnam, Bui (1999: 30) has argued that:

> traditional medicine is more gentle, acts progressively and for this reason, in emergency cases, must come second after classical treatment methods (modern medicine). However, when the critical phase has been overcome, traditional medicine offers incontestable advantages.

In urban areas of Vietnam, Hữu suggests that "moderately Westernised Vietnamese favour a combination of traditional and modern medicine; they believe modern medicine is better in the treatment of microbial diseases and in surgery, while traditional medicine works best for non-microbial diseases, functional disorders and general exhaustion" (Huu and Borton 2003: 21).[119]

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[118] Opium addiction is of course not a new phenomenon in Vietnam, but there is no question that urban youth are increasingly seen as succumbing to the vices of a 'westernised' lifestyle in the cities of Vietnam – "Heroin is the most common drug used, especially among young users, and especially in urban areas" (see UNODC 2005).

[119] Taylor has argued a similar point in the recent history of Chinese medicine: "In modern Chinese society, in those areas of life where the use of Chinese medicine is optional, Chinese medicine appears to continue to

Now, it is crucial to point out that I am of course not in any way suggesting that as herbal medicine has come to be bio-politicised and normalised, herbal practitioners and users have ceased understanding and working on various ailments in terms of patterns of disharmonies in the flow of vital energies – as we saw in previous chapters, the concepts of *khi* and *vis medicatrix naturae* continue to be central to Vietnamese and British herbalists' accounts of the workings of herbal medicine. Rather, what I am arguing is that we cannot account for the revival or renaissance of traditional herbal medicine in Vietnam or the UK without understanding the health problems to which they have been proposed as a solution to in recent decades. In both cases, these health problems have in large part emerged out of particular socio-economic and epidemiologic problematisations, and it is *qua* their applicability in treating them that traditional herbal medicine is promoted by herbalists and/ or public health officials.[120] Even if traditional herbal remedies continue to be prescribed and used in order to rectify disharmonious patterns of vital energy or imbalances in pulses and flows of vital energy considered individual to each patient, these imbalances and disharmonies are nevertheless explicitly and firmly placed into a context of dramatic epidemiologic transitions, which it is argued have occurred/are ongoing in both countries. In an important sense, it is the processes of modernisation that are held responsible for disturbing these energy flows and thereby for negatively impacting the quality and length of life of populations. And it is precisely in this context that herbal medicine has been accorded a public health value in both countries.[121]

And so, while it is the stress and harmful lifestyles associated with 'a modern way of life' that are seen to be disrupting vital energy resonances, flows or pulses in ways particular to each patient in affluent areas of the United Kingdom and Vietnam and making them amenable to herbal treatments, it is to treat the infectious and communicable diseases that thrive in squalid living conditions that Vietnamese herbal medicine has in particular been harnessed in the more rural areas of Vietnam. Yet as I have already suggested, this very much corporeal component of human vitality – where the life mechanisms of the body are

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function on a level of general well-being and for the treatment of minor illnesses. In cases of distress, Chinese medicine comes a resounding second to the more popular Western medicine" (2005: 152-3).

[120] This is the point I made in the preceding chapter with Heantos and St. John's Wort, which have been promoted as herbal remedies against addiction and depression respectively, even if their scope is considered much broader by herbalists.

[121] Not of course by all, as there are without doubt those who question any such claims of a public health value (see chapter 4).

seen to be disrupted either by communicable, viral or lifestyle-related diseases (in a biomedical sense) or by blockages, disharmonies or imbalances in the flows of vital energies (in a vitalistic sense) – is but one component of life today; a component which specifically pertains to longevity. As we will see in the following, however, not only is herbal medicine used to target the life mechanisms of the body, it is also explicitly mobilised to improve the *quality* of this corporeal life, which is to say the ways in which temporal longevity is experienced, enjoyed, taken advantage of and/or coped with.

Body mechanics and soul mechanics

As pointed out in the opening pages of this dissertation, there have in particular been two forms of critiques against modern medicine voiced by many practitioners of herbal medicine, not to mention of other forms of traditional, complementary and alternative medicine. Firstly, even if it is conceded that modern medicine has been successful in the treatment of a number of acute and life-threatening conditions, it is nevertheless maintained that modern medicines are "toxic", "aggressive" and prone to side effects (see Bùi 1999; Hoàng 1999; McIntyre 1988; NIMH 2004b), all of which negatively impact on a patient's quality of life. Whatever gains in longevity, these are often seen as offset by losses in quality of life during the course of a treatment. And so, in cases of chronic (vs. acute) and lifestyle-related (vs. infectious) diseases, it is argued that herbal medicines have an incontestable advantage over modern medicines because they are more "gentle", "natural" and have almost no side effects (see chapter 4 for all the caveats that such generalisations entail). Indeed, it is even suggested that herbal medicines can be used to ameliorate the negative effects of modern medicines as, for example, in Vietnam "the utilisation of medicinal plants prepared in the form of infusions, tablets, syrups and so on is indicated for some patients suffering side effects from chemical remedies" (Bùi 1999: 29-30). And so, even if a herbal medicine's efficacy turns out to be more or less comparable to that of a modern medicine in the treatment of a particular condition (as has been the case with St. John's Wort and Heantos), a herbal medicine is considered preferable by virtue of its superior safety profile. These kinds of critiques of modern medicine are what I have summed up as life-enfeeblement critiques. While they do not *necessarily* suggest that modern medicines are killing us (e.g. chemotherapy can prolong life although often with very painful side effects), they do suggest that modern medicines can and often do diminish our *experience* of corporeal life.

Secondly, it is argued that by exactly having specialised in life-threatening pathologies, "modern doctors have relinquished the shamanistic or priestly role of addressing the patient's whole world and have sought a specialist job as body mechanics" (Mills 1993: 21). Moreover, this relinquishment is seen as having been exacerbated by increasingly bureaucratised and technologised modern health delivery systems, which are by now routinely derided for having lost sight of the humans they were supposed to be healing. In today's age of increasing chronic and man-made diseases, it is argued that soul mechanics have become just as important as body mechanics. Whereas modern medicine is seen as having pretty much exclusively focused on the corporeal life mechanisms of patients, and in doing so encouraging a certain passivity and docility of them,[122] herbal medicine is seen to provide patients with not just medications and practical lifestyle advice, but also a framework of meaning with which patients can understand and relate to their particular conditions. As Mills has put it, "the beginning of an answer to the patient's most pressing question about his or her illness: 'Why me?'" (1993: 22) and as Huu has put it, a way of "thinking" about illness (2003: 19).

It is with the help of these medications, lifestyle techniques and frameworks of meaning that herbal medicine assists patients in coping and dealing with the health-related problems of their lives, including those stemming from the negative effects of modern living. That is to say, as much as herbal medicine is a technology for optimising the life mechanisms of patients (whether construed in vitalistic or mechanistic terms) it is also seen as a technology for affecting and optimising the coping mechanisms, lifestyle skills and human capabilities of patients. A herbalist, according to the Association of Master Herbalists in the UK, is "not only therapist and healer but also teacher and instructor, informing and guiding clients to the fulfilment of their well-being… In addition to [prescribing] herbal medicines, practitioners assist clients to look after themselves through correct nutrition, appropriate exercise, and through other natural healing techniques such as the use of water in hydrotherapy" (AMH 2006). And in Vietnam, it is argued that traditional medicine is not only about ensuring longevity, but is also about promoting "awareness of good nutrition",

[122] As pointed out in Chapter 1, while there has clearly been a tendency to equate a 'holistic approach' to medicine with TM and CAM therapies, it is simply not tenable to suggest that there can be no such thing as a 'holistic approach' to biomedicine (see Armstrong 1984; Watt and Wood 1988). Indeed, Armstrong has shown how at least since the 1950s biomedical doctors have come to address the 'patient's view' as a therapeutic site in its own right in terms of 'coping' and 'adjustment' (1984: 741). Nevertheless, holistic-reductionist divides continue to be invoked by many practitioners of herbal medicine to distinguish their form of practice from that of modern medicine.

ensuring "a healthy mental life" and minimising "psychological trauma" (Hoàng 1999: 228).

This, then, is the *neo-vitalism* that has allowed for the emergence of quality of life as a crucial object of life optimisation by making subsistence and existence two separate yet inherently interrelated components of life. In this neo-vitalistic configuration of bio-power, to live is certainly as a minimum to biologically subsist (including having the socio-economic means to do so), but it is at the same time more than that. It is also to experience and enjoy that life, to cope with its vicissitudes (be they seen as bacterial, hereditary, genetic, viral, toxic, neurochemical, traumatic, psychosomatic or *khi*-energetic in origin), to unfold the human subjectivity potentials that it makes possible, and indeed to be able to function in ways requisite to a healthy subsistence *and* a healthy existence. Human life itself becomes, in a sense, the cold flesh that is to be (re)vitalised with 'quality', as biology (quantity of life) and subjectivity (quality of life) become inescapably interlinked. That is to say, not only are there bodies to be (biomedically) repaired or (herbally) rebalanced, there are also 'deadened' and/or 'disoriented' subjectivities to be rescued and/or stabilised. It is in this way that I suggest 'quality of life' could emerge out of modernisation critiques[123] to become a concrete target of overall life-administering operations, making life itself and human subjectivity itself inseparable objects of life optimising interventions.[124]

If there is 'mere' life in neo-vitalistic terms then it is the mere fact of subsisting, understood as anatomical and biological mechanisms of longevity. A complete, full, optimal, good or enjoyable life, on the other hand, is one that has been imbued with quality, and it therefore requires persistent work not only on the subsistence of populations and individuals, but also on their existence. If subsistence can be thought of as biological life (again, whether vitalistically or mechanistically construed), then existence – that is to say experiencing, coping, enjoying, unfolding human potential – is anthropological/psychological life. And just as Foucault (1978) has argued that life and its mechanisms, in both individual bodily (anatomo-politics) and collective population (bio-politics) forms, were brought into a realm

[123] Critiques which as I have already pointed out date back to at least the 19th century.
[124] This argument builds on Rose's (1996b) suggestion that in the latter half of the 20th century advanced liberal political rationalities introduced an entire host of techniques for governing *through* individuals' subjectivities, as well as Armstrong's suggestion that the patient's view was reconstructed in post-war medicine such that "the patient can no longer be encapsulated in a single gaze; the whole person is a multi-dimensional rather than unitary being… the patient as subjective body" (1983: 110; see also Armstrong 2002: chapter 7).

of explicit calculation enabling it to be intervened upon and improved, so too have the mechanisms of individual psychological life (what we might think of as a psy-politics) and a collective sociological/anthropological life (what we might think of as an anthropo-politics), making these realms of both individual and collective human subjectivity amenable to intervention, as we will be seeing.[125]

We should not, however, confuse this relatively new neo-vitalistic concept of 'quality of life' with the 'life force' that, for example Vietnamese and British herbal practitioners have long since suggested somehow animates or gives purpose to otherwise lifeless or 'inert matter'. As we saw in the previous chapter, whether described in terms of vital rhythms that ensure a kind of homeostatic balance in the body, a driving force which secures the movements and activations that are necessary for vital balance and harmony, or a universal vital force which must be allowed to flow unimpeded to maintain harmony and health, vitalism in this sense is that which animates, provides direction, or gives vital purpose to what would otherwise be a "mere assemblage of materials" (Bergson 1911: 252). It is seen as the source, origin, texture or cause of life, without which human life itself would not be possible. Neo-vitalistic quality of life and the human capabilities and skills that foster it on the other hand are neither an invisible, fluid-like vital force nor are they a life-enabling vital rhythm or pulse. Indeed, they are in no way a precondition for, although they can have a direct effect on, human subsistence, and vice versa. Rather, they are linked to another, perhaps less explored, side of vitalism today; namely that of human existence and experience – or human subjectivity itself.

I will now turn my attention towards how this understanding of a neo-vitalistically configured bio-power can help us to situate the revival of traditional herbal medicine use in both Vietnam and the United Kingdom, albeit in very different ways. As I map out some of the key characteristics of herbal medicine use in both countries, I will demonstrate how different ways of thinking about subjects and subjectivities derived from anthropology and sociology (especially its medical sub-disciplines) have been particularly salient in the ways

[125] With this distinction between a psy-politics of individual subjectivities and an anthropo-politics of multiple subjectivities I do not intend to suggest that anthropology has nothing to say on the formation of individual subjectivities (see, for example, chapter 5), or that the psy-disciplines have nothing to say on the formation of collective subjectivities (take, for instance, social psychology). The use of these two terms is purely strategic. Incidentally, a similar point can also be made about anatomo- and bio-politics.

in which *herbal medicine use* has come to be thought about, problematised, governed and managed in both countries today.

Managing lifestyles – the swarming of grassroots techniques of life optimisation

As we saw in chapter 4, in the United Kingdom, herbal medicine is by far mostly being used as a form of self-medication, with an estimated 7-12% of the British population having used some kind of herbal medicine during the course of a year, compared to 1% who in a given year actively seek out and consult a medical herbalist (O'Sullivan 2005: 184). We also saw how public health strategies in the United Kingdom have shifted away from directly discouraging use towards promoting the 'safe' and 'responsible' use of herbal medicine. Moreover, in evoking the teachings of American herbalist John Christopher, Chairman of the British Association of Master Herbalists Peter Jackson-Main has argued that the ideal to work for is to "have a herbalist in every home" (2005: 97). If we take St. John's Wort use in recent years as a case in point, such a pattern of responsibilised self-treatment becomes more than evident in its over-the-counter sales figures, as well as in a recent proliferation of self-help literature, patient guides and FAQ internet sites offering potential users with practical advice on how to manage a course of treatment with St. John's Wort, not to mention general lifestyle instructions.[126]

These are what we might think of as grassroots techniques of life optimisation, made available to herbal patients via word of mouth, awareness programmes, popular media, internet searches, as well as through consultations with herbal practitioners. Since the late 1990s, some twenty popular St. John's Wort self-help guides have been published in English, including: Rosenthal's *St. John's Wort: The Herbal Way to Feeling Good* (1998), Bloomfield et al.'s *Hypericum (St John's Wort) and Depression* (1998), Turkington's *The Hypericum Handbook* (1998), Zuess's *The Natural Prozac Program: How to Use St. John's Wort, the Anti-Depressant Herb* (1997), Knishinsky's *The Prozac Alternative* (1998), Chevallier's *Hypericum – the Natural Anti-Depressant and More* (1999) and Cass's *St. John's Wort: Nature's Blues Buster* (1999). On the internet, sites like "Kelly's St. John's Wort info pages" (www.sjwinfo.org), the "St. John's Wort & Depression HomePage" (www.hypericum.com) and "Herbal relief for depression" (http://www.all-

[126] Ironically enough, so popular has St. John's Wort become that herbalists often lament that the high media exposure of St. John's Wort has "fuelled a mistaken idea that a particular herb can 'fix' a particular problem, and that all people need do is go and buy a bottle" (Great Britain. Mind. 2004: 12).

natural.com) boast of visits in the "tens of millions". And finally, in the past few years, organisations like Mind (Britain's National Association of Mental Health) and Patient UK have put out leaflets to help guide potential St. John's Wort users through safe and responsible self-medication with herbs.

I will highlight four key features from these grassroots techniques of life optimisation, all of which are available to "people of all ages who are trying to cope with short or long-term problems" and allow them to place their suffering within a holistic context of "medical, dietary and emotional history and lifestyle" (Great Britain. Mind. 2004: 9). The first aspect worth noting is their emphasis on providing cognitive meaning frameworks for patients as a concrete coping technique, in chapters with titles such as "Understanding Depression", "Hypericum – Herbal Anti-Depressant" and "What is Depression?". Interestingly, what emerges from these different practical guides is an eclectic mix of symbolic frameworks intended to provide users with what herbalist Simon Mills has referred to as "imagery and models of their illness" (1993: 21). These include suggestions that depression can result from any combination of a stressful lifestyle, disturbance in brain chemistry, unhealthy diet, emotional problems stemming from relationships, family or work as well as underfed and undernourished nervous systems:

> Never before have people been subjected to so much social stress. Until this century, most people lived in communities where people all knew each other… These days, our society has become increasingly fragmented. Most people live in small, nuclear families, or alone, far from their relatives and childhood friends. And we interact with more strangers in one day than people who lived two hundred years ago did in a whole year. This combination of isolation amidst the crowd is a setup for social stress and for feelings of rejection… St. John's Wort helps make people less vulnerable to this stress. (Zuess 1997: 23)

> Each of us has our comfort zone in which we can function happily and efficiently, and each of us has our limit, beyond which our capacity to function breaks down. When someone becomes depressed, that breaking point has been exceeded… [M]odifying elements of one's life can contribute enormously to an antidepressant lifestyle that works beautifully in conjunction with… St. John's Wort. (Rosenthal 1998: 91, 136)

> The brain is an intricate system of chemistry and connections that are currently being discovered… [Depression] is thought of as a disruption of normal connections in the brain. The brain's transmitters of information function like a network of interdependent computers. When one computer misfires, the connections between all the computers crash… Hypericum

> [has] the ability to inhibit the reuptake of [these] neurotransmitters. (Knishinsky 1998: 24-5, 48)

> Depression is often due to nervous exhaustion, adrenal 'burn-out' or viral infection… [St. John's Wort] acts to strengthen the nervous system as a whole. (Chevallier 1999: 38)

There are countless 'testimonials' that suggest a symbolic efficacy for these explanatory frameworks scattered throughout the self-help guides on St. John's Wort: "I now understand how a lack of serotonin depleted by stress can really affect mental health", "his story reminded me once again of how important it is to add healthy activities to any antidepressant intervention" and "what it really comes down to is a change in lifestyle… I really think that a combination of things is what is needed to overcome depression, therapy, medication, nutrition, exercise, prayer, meditation" (cited in Martin 2006; Rosenthal 1998). In a Levi-Straussian reading of such testimonials, one might say that for these St. John's Wort users "protagonists have resumed their places and returned to an order which is no longer threatened" (see chapter 5), the protagonists being neurotransmitters (which can misfire like computers), nervous systems (which can 'burn out'), lifestyles (which can take us past our breaking point), social ties (which can become fragmented and isolated), and of course St. John's Wort which is enlisted to redress these disturbances.

This is the point that the House of Lords Select Committee raised in their CAM report when pointing out that there may well be "a better fit between patient's view and... CAM explanatory models [as these] are more likely to consider factors such as emotional and social factors in disease and so will be concerned with the patient's overall experience" (Great Britain. Parliament. House of Lords. Select Committee on Science and Technology. 2000: 3.17). It is also the point that Sharma, in her sociological study of CAM use in the UK, was making when arguing that the appeal of CAM treatments such as herbal medicine can in good part be explained by its offer to patients of "a new way of looking at their illnesses, that sense of a more relevant order being imposed on problematic experiences [and]… insofar as this new interpretation is found acceptable and creates positive feelings of comfort and confidence on the part of the patient, then there is a sense in which it has 'worked'" (Sharma 1992: 72). At the same time, however, just as medical anthropologists have argued that subjects in the so-called 'developing world' are notoriously eclectic in the ways in which they enlist various symbolic frameworks (from spirit possession to germ theory), the same argument can certainly be made in a western context like that of the

United Kingdom. Sharma suggests that "it need not surprise us that individuals may prefer orthodox medicine for one purpose, homeopathy or herbalism for another... [since] choosing to consult a non-orthodox practitioner does not in itself mean a rejection of orthodox medicine as a total cultural system (nor total acceptance of an 'alternative' system)" (1992: 81-7). With St. John's Wort, as we have seen in the previous and current chapters, explanatory frameworks range from the cutting-edge neuroscientific theories of pharmacologists to the age-old vital life force theories of herbalists.

A second feature common to these grassroots techniques of life optimisation is the responsibilising cautions and warnings they communicate to self-medicating users of over-the-counter St. John's Wort products. While self-medicating is seen as more than appropriate for the kind of "everyday problems" or "mild to moderate" depressions suffered by many, it is also stressed that self-help guides "are not intended as a substitute for medical care" and that a patient should "consult a qualified herbalist or GP" if symptoms persist or before switching from prescription medications to herbal medicines (Bloomfield, et al. 1998: 5; Great Britain. Mind. 2004: 8; Rosenthal 1998: xx). Each of these cautions is linked to concerns about what former NIMH president Trudy Norris has referred to as "self-prescrib[ing] in an inappropriate way" (BBC News Online 2002). Patients are also advised to keep their GPs informed of any herbal medications that they take (Great Britain. Medicines and Healthcare products Regulatory Agency. 2004b; Patient UK 2005).

Recalling the safety and quality issues arising from the industrialisation of herbal medicine discussed in chapter 4, it is also interesting to note that these self-help guides provide advice on "how to shop for St. John's Wort" or "how to obtain research-grade hypericum", highlighting that there has been an explosion in the range of St. John's Wort products available leaving the consumer with little chance of knowing where to look for good quality – "do a bit of research before you buy anything". Overall, herbal users are urged to be vigilant and to monitor their own treatments, being sure to note "any side effects you experience" or "if the symptoms aren't getting better within a few days" (Bloomfield, et al. 1998: 79; Great Britain. Mind. 2004: 7, 9). The point being that herbal medicine is to be used in an appropriate and responsible manner that requires users to constantly monitor themselves and if ever in doubt to consult a qualified practitioner (either modern or herbal). All of these responsibilising cautions are examples of what I, in chapter 4, suggested can be

understood as awareness-raising techniques for promoting herbal vigilance on the part of self-medicating users of herbal medicines.

Thirdly, self-help guides on St. John's Wort are filled with lifestyle-related advice. Treating depression holistically, it is asserted, has to do with much more than taking 300 mg of hypericum two or three times a day, as patients are urged to evaluate their own lifestyles in terms of sleep patterns, diet, exercise, family life and work life. This is perhaps especially the case with a condition such as depression, which is often described as an inevitable side effect of modern living – eating on the run, overworking, no exercise, little 'quality time' with family, over-consumption of toxins such as alcohol or caffeine, etc. As a consequence, users of St. John's Wort are encouraged to engage in "healthy activities" as an adjunct to the herbal remedy, thereby ensuring holistic self-treatment which makes St. John's Wort not an instant fix but rather "part of an anti-depressant lifestyle" (Rosenthal 1998: 135). Importantly, much emphasis is placed on the notion of empowering patients into "taking control of your life", as it is argued that "people like the idea of having more control over their own treatment" (Great Britain. Mind. 2004: 4). And Rosenthal (1998: xviii), in his St. John's Wort guide, argues that:

> Obtaining knowledge about how you can fight depression is one way of regaining a sense of mastery. As you take each successive step toward combating it, you will begin to turn the problem around and feel increasingly better, closer and closer to recovery.

As we saw earlier, one of the most common critiques of an overly bureaucratised and rationalised modern medicine is that it turns people into passive patients, mechanically transferred from specialist to specialist. Put in another way, patients in advanced liberal countries such as the United Kingdom are seen to have become increasingly ossified and dehumanised, conditions that herbal medicine users are encouraged to remedy by reclaiming charge of their lives and their health. To overcome their passivity, herbal medicine users are provided with an entire range of concrete methods and activities for taking control of looking after their conditions and selves, this being the final and perhaps most important feature of the grassroots techniques of life optimisation. These include concrete treatment plans which include information on dosages, practical ways to monitor progress during treatment, as well as instructions on when it is best to contact a qualified medical worker.

Table 4: Log for Monitoring Effects of St. John's Wort on Target Symptoms of Depression[127]

Target Symptom (e.g. anxiety, low energy, etc.)	Baseline and Weeks 1 through 6						
	Baseline	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6

Scale:

0 = no change
1 = a little better
2 = quite a bit better
3 = a lot better
4 = completely better

-1 = a little worse
-2 = quite a bit worse
-3 = a lot worse

In a chapter entitled "Developing a game plan for using St. John's Wort to treat depression", Rosenthal provides readers with methods for diagnosing the severity of their depression, advice on getting the dose right, a suggested dosing schedule, as well as a log for monitoring the effects of St. John's Wort on target symptoms (see Table 4). Such tools for the practical management of depression are of course very common to the self-help literature not only on St. John's Wort but also on many other anti-depressant medications, and they should be understood as specific techniques of 'safe', 'responsible' and 'active' medication for those patients who choose not to see a qualified medical herbalist or doctor about their depression and instead take affairs into their own hands. They are concrete guides on "how to use the herbal remedy in an informed and effective way to overcome depression and enhance quality of life" (Rosenthal 1998). There is a consistent emphasis on ensuring that self-treating users of St. John's Wort concentrate not just on the medicinal side of the treatment, but also on aspects of quality such as their emotional wellbeing, experience of family life, coping with work-related stress, etc.

[127] From Rosenthal (1998: 118).

And so it is in these particular ways that I suggest herbal medicine users in the United Kingdom are provided with techniques to transform themselves into what we might think of as 'petty engineers of modern life' (cf. Rose 1999), encouraged to take responsibility for and control of their own lives when it comes to their health. This is not a task aimed solely at the optimisation of the biological capacities of the body (e.g. by rebalancing neurochemical levels in the brain or by nourishing nervous systems), it is also aimed at optimising and harnessing coping skills, patient identities, lifestyle awareness and human capabilities by targeting human subjectivity. As I have pointed out, crucial to these grassroots techniques of life optimisation (which extend far beyond the scope of herbal medicine and into the National Health System's patient choice programmes or nutrition awareness campaigns) are firstly, the symbolic frameworks which allow patients to relate to their conditions, and secondly, through these frameworks, the practical treatment regimens as well as the lifestyle advice, which allow patients to take appropriate control of their lives and care of their bodies and subjectivities.

In this way herbal medicine can propose particular models "for setting up and developing relationships with the self, for self-reflection, self-knowledge, self-examination, for the decipherment of the self by oneself, for the transformations that one seeks to accomplish with oneself as object" (Foucault 1985: 29). In other words, herbal medicine provides users with an ethics of lifestyle management in which the consumption of herbal remedies for certain conditions and symptoms is but one element of the *ascesis* required in an overall ethical project of life optimisation, which calls for a permanent scrutiny and adjustment of not just one's daily lifestyle practices but also one's cognitive meaning frameworks or lifeworlds. It is a kind of psy-political project of self-realisation through technique. There is to be balance between work and rest, moderation in the toxins one consumes, sufficient attendance to emotional and spiritual health through spending time with family and friends, or taking a break from it all in the countryside, balance in the diet one consumes as well as adequate physical exercise to keep one's body tuned. But, equally importantly, there is also to be coherence and reassurance in the ways in which one relates to any vicissitudes that might arise; disorientation is to be counteracted with a meaning framework-facilitated grounding or mooring. Guiding all of these grassroots techniques of life optimisation is an ethical *telos* of coherence, responsibility, awareness, reflexivity and activeness, states of being that for most will likely remain just that, goals to be striven for, but nevertheless ones

that should never be lost sight of no matter how stressed one's life has become due to the duress of a modern way of life.

Revolution and the re-formation of a *Vietnamese* medicine for *Vietnamese* people

As already underlined, we should not in any way assume uniform assemblages of life-optimising strategies and techniques of the self in different geo-cultural settings. As such, it would be wrong to place emphasis on the kind of self-help approaches to promoting health and quality of life found in British herbal medicine, when addressing the subjectifying effects of very much *national* efforts to actively promote the use of traditional herbal medicine in Vietnam. Such approaches can certainly be found in Vietnam as I will also demonstrate, but what I will first of all argue here is that the promotion of Vietnamese traditional medicine has aimed not only at tackling the differentiated epidemiologic problems found throughout Vietnam by providing people with improved skills and means to care for their personal health, but equally significantly it has also played an extensive role in attempts to remedy what former Director of the Institute of Traditional Medicine Dr. Nguyen Van Huong diagnosed as a "national inferiority complex caused by long years of foreign domination" (Nguyen 1965: 29-30). One way to overcome this collective inferiority complex, I will suggest, has been to revive traditional medicine not just as a matter of public health but also as an equally pressing matter of national self-esteem. What is more, I will also show how in more recent years, following the opening up of Vietnamese markets and travel restrictions coupled with the gradual dropping of trade embargos against Vietnam, it has been argued that this notion of a *Vietnamese* medicine is once again under threat, this time from the disorienting effects of globalisation.

As highlighted in chapter 4, the modernisation and repopularisation of traditional herbal medicine has been an important component of Vietnam's postcolonial nation-building project, especially so in a context of conflict and embargos. Yet, according to former Minister of Health Pham Ngoc Thach, actively recruiting traditional medicine into public health programmes was about more than 'just' finding pragmatic health solutions in a constrained socio-economic and political situation, it also had to do with the formation of "ideological courage" (Pham 1965: 18). The colonial years, he argued, had left a debasing mark on Vietnamese subjectivities as people had for decades been confronted by a colonial power intent on dismissing their ancient medical traditions as unhygienic, superstitious and indeed harmful. For this reason, the Democratic Republic of Vietnam's strategy to develop

their traditional medicine should contribute to the "building of national culture" (Nguyen 1965: 22) which, it was underlined, was no easy task in the face of a commanding colonial legacy:

> To practice a complicated surgical operation with costly ultramodern apparatus imported from abroad gives more prestige than to lecture on hygiene in villages, or to help village cadres complete their medical education… To have been convinced long since of the absolute superiority of so-called western medicine, to have considered traditional medicine a superstition, and now to approach it with respect, with the desire to learn from it, constitutes also a turning point for our medical corps. It needs great courage to devote oneself to scientific research with inadequate technical means, equipment, and scientific knowledge when one always thought that this work requires large, well-equipped laboratories and can be done only by experienced academicians. (Pham 1965: 16-9)

In this sense, promoting traditional herbal medicine with the help of techniques of cultural revival in Vietnam has played a significant part in systematic efforts to rehabilitate colonially repressed subjectivities. By providing Vietnam's medical corps as well as the Vietnamese people with concrete means to 'rediscover' their cultural heritage in the medical field, the nation's inferiority complex when it came to medicine could "be eradicated as well as scepticism about the national medical experience and about Southern medication" (Nguyen 1965: 30). While such anthropo-political problematisations have concerned a collective Vietnamese subjectivity they have in turn also generated a host of techniques of cultural revival targeted at individuals in the form of the various grassroots health promotion programmes, refresher courses in Traditional Vietnamese Medicine, training of traditional medicine activists, networks of traditional medicine practitioner associations, and collection expeditions to gather traditional knowledge discussed at length in chapter 4. This has been as much an anthropo-political project of emancipating a collective national identity as it has a public health strategy to protect and promote the health of individuals and sub-populations. It is no coincidence that the most oft-cited phrase in descriptions of ongoing national efforts to rejuvenate traditional medicine is Tue Tinh's 500 year-old maxim "Southern medicine for Southern people".

At the same time, it is important to underscore that the emancipation of Vietnamese subjectivities through techniques of cultural revival has without question taken place in the name of modernisation and progress. While it is very often highlighted that the "scorn of Western-trained physicians for traditional medicine derives from an erroneous conception

of science and a profound ignorance of the results obtained by traditional medicine" (Pham 1965: 12), this should not be read as some kind of a plea to return to a pre-colonial medical golden age. In looking back at the first ten years of the Democratic Republic of Vietnam's efforts to promote health in Vietnam, Pham Ngoc Thach (1965: 3) argued that:

> Our country in 1955 was not only poor; to age-old misery was added the havoc wrought by several years of war. The population was threatened with famine. Moreover – and we should not be afraid of using the right word – we were a backward country. Centuries of feudalism followed by nearly a century of colonial regime left our country in a state of unthinkable backwardness. People still drank water from stagnant pools and invoked the spirits when they fell ill.

What is important about the Minister of Health's verdict is the way in which dual sites of problematisation are bracketed out. On the one hand, backwardness refers to a battered health infrastructure which had been made all the worse by decades of war and colonial neglect, especially in rural areas where healthcare provision was rudimentary, if at all existent. But the Minister was also arguing that a part of the health problem in Vietnam was what he saw as a 'backwardness of our people' which perpetuated unhealthy practices – "people had the habit of relieving themselves in any place they found convenient" and were "drinking water from the pool where he also washes his rice and vegetables" (ibid.: 6). In other words, this was an ethical form of backwardness that was to be addressed and improved through a kind of 'civilising process', which included "education in cleanliness" and "persuading people to drink only boiled water, building septic tanks, killing flies and other insects" (ibid.). Throughout the latter half of the 20th century, outmoded (*hủ tục*) or negative (*tiêu cực*) traditions (often connected with spiritualism, sorcery and fortune telling) have been targeted for elimination by the government, in contrast to good (*tốt đẹp*) and wholesome (*lành mạnh*) traditions (*truyền thống*), including traditional medicine, which have been actively promoted and encouraged (Taylor 2004: 37-56).

Today, some fifty years since the revitalisation effort began, health authorities continue to distinguish between "backward" and "good" traditions, arguing that "people at the village and commune levels, especially those residing in areas where the basic health system remains weak, typically go to non-professional people (e.g. friends, neighbours, relatives, those who incur the same disease) when getting ill, or they even seek the services of charlatans, sorcerers, magicians, etc." (Vietnam. Ministry of Health 2006). As such, basic

health and hygiene education as well as awareness-raising about 'bad' or 'unhealthy' traditions continue to be a priority of official health programmes in many rural areas of the country.[128]

It is in this kind of self-care education and health promotion that traditional herbal medicine has come to take on a renewed and very practical importance in recent decades. As we saw earlier, a consistent part of Vietnam's postcolonial herbal medicine revitalisation effort has been to "mobilize, encourage and guide people in [the] planting, raising and use of plants and animals as *materia medica*" (Vietnam. Ministry of Health 2006). In such rural programmes, the family is considered the most important unit responsible for promoting the health of individuals, a view also captured in the popular Vietnamese phrase *Tu than, te gia* (improve yourself, manage your family) (Craig 2002: 50). It is these families that are to be encouraged to grow their own medicinal plant gardens, and it is within each of these families that a 'doctor at home' is to be groomed. It is also these families that have long formed the locus of medical treatment, with especially mothers playing a central role in memorising family remedies, discussing and exchanging experiences with neighbours and friends, and also in preparing remedies in the home.

Now, in the past couple of decades or so, with the implementation of a series of economic reforms starting in 1986,[129] the gradual lifting of trade embargos against Vietnam and the development of a national pharmaceutical industry, cheap generic modern medicines (especially antibiotics) have joined traditional remedies as an important part of household medicine and treatment. Moreover, as noted in chapter 4, these developments also led to a situation where a considerable number of traditional practitioners abandoned their practices following the loss of subsidies that they had previously received from the government. It was against this background that the latest of revitalisation pushes was put in motion by the Ministry of Health in the early 1990s, with the launching of the 'Doctor at Home' and 'Drugs at Home' programmes, as well as the development of a national traditional medicine strategy (see chapter 4).

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[128] In this sense, there are clear continuities with colonial problematisations of 'superstitious' and 'backward' natives (see chapter 3). However, such problematisations have been redistributed within Vietnam, such that especially more rural population groups and ethnic communities are considered more prone to 'backwardness' than, say, the urban populations of Hanoi or Ho Chi Minh City.

[129] Known as the *Đổi mới* (renovation) reforms.

Whereas some of the first postcolonial efforts to revitalise traditional medicine were described in terms of 'civilising' and 'emancipating' initiatives, it is interesting to note how this latest of active efforts to promote traditional medicine has come to be cast. As Taylor has shown, the 1990s in Vietnam was marked by a "turn to culture" as Vietnamese authorities commissioned ethnologists and folklorists to catalogue the country's ethnic and cultural diversity, published numerous books on Vietnamese identity, and prepared guides to traditional festivals and folk beliefs – not in the least as a means of "provid[ing] cultural moorings, equilibrium, and spiritual solace to a country… that is embarked on a course of rapid and disorienting cultural, social and economic transformation" (2004: 44, 91). It was during this time that traditional medicine in Vietnam came to be consistently referred to as "*Vietnamese* traditional medicine" as opposed to a generic 'traditional medicine', not least as a way to distinguish it from Chinese medicine:

> far from being merely a copy of Chinese traditional medicine… Vietnamese traditional medicine is made up of ancient health care practices related to the Vietnamese culture. (Hoàng, et al. 1999)

The point being that, as Vietnam increasingly opened itself to globalising influences during the course of the 1990s, Vietnamese subjects were seen as having to negotiate their way through a plurality of forms of healing advice and medicaments. By the end of the 20th century, antibiotics had become as common as traditional herbal remedies in day-to-day family health practices. And while welcomed as an indicator of increasing modernisation and economic growth by health authorities in Vietnam, this situation of a largely unregulated medical plurality came to be seen as a public health concern in itself, especially as pertained a range of safety issues arising from the "irrational use" of modern medicines (see Craig 2002; Okumura, et al. 2002).

There are two sides to these concerns over public health. Interestingly, on the one hand, it is a situation not unlike that resulting from over-the-counter sales of herbal remedies in the United Kingdom where, because of a relative lack of regulatory controls, herbal medicine users are urged to be vigilant and to do some basic research into the quality of products before purchasing anything. In a very similar fashion, public health campaigns in Vietnam have begun urging users of over-the-counter modern medicines to be vigilant of counterfeit and bad quality products, a task that many have already taken on board based on bad

personal experiences (Craig 2002; Vietnam. Standing Committee of National Assembly. 2003).

On the other hand, as modern medicines have become increasingly available and entered household health practices, it seems that their efficacy has come to be, in a kind of reverse 'colonisation', explained in terms of the humoral and vitalistic theories of traditional Vietnamese medicine rather than the germ, cell or gene theories of modern medicine. As Craig (2000) has shown, modern medicines are considered 'hot' (*nhiet*), 'heavy' (*nang*) and 'strong' (*suc*) medicines, and users often shop around to find a 'suitable' medicine – not only according to the condition that is to be treated but also to find a medicine that is 'compatible' with or 'familiar' to the individual using it. This 'cognitive colonisation' of modern medicines, it is argued, has contributed to "irrational use" understood in terms of harmful polypharmacy (e.g. mixing of many different antibiotics) or inappropriate dosages (most often much too short treatment courses) which are increasingly being tackled as public health problems, especially as they are seen as contributing to the building up of antibiotics-resistant bacteria (Craig 2002; Okumura, et al. 2002). Vice Minister of Health Le Van Truyen argues that "it is necessary to prevent and address negative effects caused by unsafe and irrational drug use such as shorter courses than required, overdose, misuse of drugs, wrong combination of different types of drugs, drug abuse" by providing the public with "instructions for rational and safe use of drugs" (Vietnam. Ministry of Health 2006).

And so, just as one finds Sino-Vietnamese notions of hot and cold or wind and damp organising health promoting practices of the self, so too can one find biomedical concepts of germs, contagion and infection circulating in various forms of household advice that encourage healthy living on a day-to-day basis. Interestingly, it is exactly this multiplicity of rationalities – a side effect of colonisation and globalisation – that has recently come to be problematised in itself. Taylor and Craig argue that "Vietnamese leaders in the 1990s were increasingly prone to take a functionalist approach to culture [reflecting] a strong feeling that Vietnam would need to fight to preserve its traditions, national essence, and distinctive psychology against the depredations of global culture" (2004: 56), not least in the field of medicine where:

> Vietnam's experience of trying to harmonize Eastern and Western medicines shows [that] the two rationalities are so radically different at the

> levels of epistemology, organizing metaphor, and clinical approach that relations are more of an unbalanced contest and a partial appropriation than a synthesis... The conflicting authorities of tradition and modernity, mothers and grandmothers, self, household, and medical professional means that antibiotic consumers must negotiate a plurality of conflicting notions, locations, and positions about what constitutes 'correct'. And as the sources of biomedical authority grease their prescriptions with commerce, the most locally important basis for knowing what is correct begins to slip away. The regularities of the body and the commodity run headlong into the cultural confusion of competing claims, values, and maxims of local and global rationalities. Not surprisingly, people get their stability where they can. (Craig 2002: 213, 160)

What is needed instead, Craig suggests, is a symbiosis of global and local rationalities where global drug regulations "mimic the modalities of existing household drug regulation by taking on, for example, the simple formulism of popular drug mnemonics, so they can travel within local, oral discursive formations" (ibid.: 214). In this way, incommensurability can be approached as a practical hurdle, amenable to technical interventions aimed at human subjectivities – awareness campaigns, localised strategies to encourage proper drug use, programmes to re-educate Vietnamese subjects about the proper use of traditional medicine, etc. – in ongoing efforts to harmonize Eastern and Western medicine. This is what I argue can be seen as part of an ongoing governmentalisation of individual and collective lifeworlds, where the cognitive and symbolic frameworks of individuals and populations come to be circumscribed and indeed harnessed in efforts to optimise life.

A final important point to make is that, as already suggested, traditional medicine is increasingly being recruited in the treatment of the chronic and lifestyle-related diseases seen to result from Vietnam's ongoing modernisation, industrialisation and epidemiological transition. As diagnoses of addiction, musculoskeletal afflictions and mental illnesses have become more widespread, so too have traditional remedies for their treatment such as Heantos, the *dưỡng sinh* vitality preservation method (see Table 5), as well as various acupuncture and massage regimens. Traditional treatments are often seen as more time consuming than modern medicines, yet perhaps for good reason, as they are seen as a means to address the underlying roots of a condition by restoring vital harmony and balance. In this way, just as is the case in the United Kingdom, ingesting certain herbal remedies is but one part of an overall task of health promotion, as traditional medicine also

aims to provide advice on nutrition, promote a healthy "mental life" and encourage balancing periods of work with sufficient rest (Hoàng 1999).

Table 5: *Dưỡng sinh* vitality method[130]

I. Dưỡng sinh method (Vitality preservation method)

Dưỡng sinh is a training method in Vietnamese traditional medicine which aims to maintain good health in old people in order to assure them a long and useful life.

It specifically attempts to:

1. Promote awareness of good nutrition.
2. Practice deep breathing, train the central nervous and neurovegetative systems, boost respiratory function, activate the circulation and massage internal organs.
3. Practice relaxation, and boost the activity of the central nervous and neurovegetative systems.
4. Practice auto massage and finger pressures to boost the activity of sensory and internal organs.
5. Practice anti-sclerosing movements to maintain good function of the joints of the motor system.
6. Balance work and rest to boost work efficiency.
7. Assure a healthy mental life, avoid all psychological trauma.
8. Protect the subject against external pathogenic factors.

These urban forms of grassroots techniques for coping with the vicissitudes of modern living in Vietnam often derive from symbolic frameworks provided by Sino-Vietnamese theories, where, as we saw earlier, illness is seen as "the result of an imbalance in vital energy – excess or insufficiency – in certain organs [and] the art of treatment consists, therefore, of strengthening, dispersing or normalizing the circulation of vital energy around the sick organ" (Hoàng, et al. 1999: 6). Consequently, a multiplicity of techniques of the self are available for the management of this circulation of vital energy, including specific herbal remedies mixed together by herbalists in their shops, dietary advice given at a consultation with traditional practitioners or by family members, exercise techniques practiced by many on pavements as each new day breaks, as well as massage and acupuncture techniques offered by practitioners in their surgeries. Each of these is a component of what is considered a 'healthy lifestyle' (we might say 'anti-imbalance lifestyles') in Vietnam, aimed at promoting both longevity and quality of life through strategies of vitality preservation.

[130] From Hoang (1999: 228).

And so, we can see how important ethical work on Vietnamese subjectivities has been to the promotion of health and traditional herbal medicine in the past few decades. To begin with, ethical pathologies of docility, passivity and inferiority attributed to decades of colonisation were actively counteracted through techniques of cultural revival and emancipation, which included a national project to collect and celebrate the experiences of traditional herbal practitioners throughout the country. Secondly, it has entailed addressing a certain perceived 'backwardness' of especially rural populations in Vietnam through targeted health education and hygiene programmes – an important part of which has been a much heralded "re-education" of Vietnamese populations in the 'appropriate' practice and use of their traditional herbal medicine,[131] but not, for example, mediumship and healing. Also, "irrational" medicine use in a situation where modern and traditional medicines are freely available has recently been identified as a public health problem to be addressed through public health campaigns – "empowerment of the people, mothers in particular, is the key for success in promoting the proper use of drugs" (Okumura, et al. 2002: 1885). Thirdly, a diagnosed disorientation, confusion and cultural erosion stemming from economic, cultural and social forces of globalisation has been practically addressed through the mapping out and harnessing of traditional practices and folk beliefs (including traditional medicine) in the mooring of a Vietnamese national identity. Finally, traditional medicine therapies and techniques have recently come to be mobilised as central components in the promotion of healthy lifestyles in the face of pressures resulting from urbanisation, modernisation and industrialisation. And whatever the incommensurability of the multiple cognitive frameworks that are available to herbal medicine users in Vietnam, it is clear that life optimisation with the help of traditional herbal medicine in Vietnam is a matter of not only increasing life expectancy, but also of attending to quality of life aspects such as vitality, balance, wellbeing, coping and harmony.

Conclusion: quality and quantity in temporal life

In much the same way that life and its mechanisms – the body as organism and as species – came into a realm of explicit calculations from the 18th and 19th centuries onwards, what I have argued (taking my cue from Rose (1999), Rabinow (2003), Hacking (2002) and

[131] This is an important point since even if herbal medicine use has never been close to being eradicated in Vietnam and the vast majority of households have used and continue to use them in their daily healthcare practices, "re-education" has been deemed necessary since there are 'inappropriate' ways of cultivating, preparing and consuming herbal medicines – just as there are 'irrational' ways of using antibiotics (see chapter 4).

Armstrong (2002)) in this chapter is that so too have human subjectivity and its mechanisms through a kind of governmentalisation of human subjectivities, both as individual lifeworld and as collective consciousness. Knowledge-power remains a potent agent of transformation of human life, but what I have shown here is that power exercised at the level of life in efforts to mobilise Vietnamese and British herbal medicine relies not just on anatomical and biological knowledge about its mechanisms (whether vitalistic or mechanistic), but also on psychological, sociological and anthropological knowledge about the mechanisms of human subjectivity. This interlinking of a politics of life itself with a politics of human subjectivity itself in a particular configuration is what I have called a neo-vitalisation of life, which in turn has contributed to the inauguration of quality of life as a crucial site of therapeutic intervention; accessible via *techne*s (practical rationalities) of 'holistic healing' and yielding to a whole range of ascetic practices for working on the self – body and subjectivity – as a means to optimise subjects' quality and length of life.

In this and previous chapters, I have argued that biology and anatomy are not somehow the exclusive domains of 'biomedicine', but rather can be seen as fields where varying theories and accounts of life and its mechanisms vie for plausibility, some of which are described as 'vitalistic' (e.g. those based on Sino-Vietnamese medicine) others as 'mechanist' (e.g. neuropharmacology). The ongoing debates, controversies, practices and transformations within these fields – the games of truth or battles for epistemological authority – are what have come to be referred to as the 'politics of life itself'. I have also argued that with the emergence of 'quality of life' out of modernisation critiques there is more to modern life than 'mere' subsistence. Vitality in Vietnam and the United Kingdom today, at least as pertains traditional herbal medicine, concerns *both* the subsistence and the existence of individuals and populations. And so, while longevity, mortality, disease and morbidity pertain to a temporal bio-physiological life; well-being, illness, coping, awareness, self-esteem and reflexivity are concepts that relate to an equally temporal quality of life – the ways in which bio-physiological life is experienced, taken advantage of, negotiated and coped with. And it is ongoing games of truth within this field of human existence that I suggest can helpfully be thought of in terms of a 'politics of human subjectivity itself'.

As expert bodies of knowledge, anthropology and sociology have a lot to say about human subjectivities. Indeed, these subjectivities are one of the primary objects that these bodies of knowledge have ethnographically sought out in order to chart and describe in terms of

cultural values, understandings, identities, beliefs or drives. While some of the first anthropological and sociological theories and concepts accounted for a civilising subject (i.e. a subject who could free himself from immaturity via mechanisms of civilisation) as well as an emancipating subject (i.e. a subject who had become repressed, alienated and ossified yet who could be freed via mechanisms of emancipation), what has emerged out of 20th century sociology and anthropology (especially its medical sub-disciplines) has been a coping subject; a subject who upon becoming disoriented could regain coherence, balance and grounding via mechanisms of coping. It is these civilising, emancipating and coping subjects who time and again have been reconfirmed or disputed through what can only be described as an unprecedented stream of ethnographies throughout the 20th century. As Latour (1993) has suggested, having first travelled to the tropics of 'primitive' lands, ethnographers eventually returned home to subject their own cultures and peoples to the same kind of ethnographic inquiry that so-called 'peoples of rude cultures' had been.

What I have shown in this chapter then, is how different sociological and anthropological ways of thinking about subjects have (re)surfaced and informed efforts to mobilise traditional herbal medicine in both Vietnam and the UK. Not that these have in any way been the only ways of thinking to have infused the practices of practitioners, researchers, regulators and users of herbal medicine, but they have certainly been present in very practical ways. And so what I am suggesting is that sociological and anthropological problematisations have actively contributed to the making up of the 'whole person' subjectivities that herbal medicine so crucially rely on by providing very specific theories of subjectivity formation – sociology and anthropology have looping effects.

If this is so, is what I have described then not but a reaffirmation of the kind of westernised hegemonic dominance that many anthropological studies have exactly sought to undermine by pointing out the local particularities and rationalities of household knowledge? Where are the 'epistemologically incommensurable' bodies of knowledge rooted, for example, in indigenous Western herbalism or Sino-Vietnamese teachings on life and its optimisation? According to my analysis, they remain very much in circulation and operation in the laboratories of phytochemists, in patient consultations with herbal practitioners, in self-help and consumer awareness literature about herbal medicine, as well as in the daily health practices of herbal medicine users who more often than not use an eclectic range of medicines and treatments. Indeed they have actively been harnessed in quests for quality of

life. But these so-called 'epistemologically incommensurable', 'esoteric', 'folk' or subjugated bodies of knowledge are neither static nor alone, they are joined by biomedical, psychological, sociological and anthropological styles of reasoning, and it is exactly this multiplicity of rationalities and symbolic frameworks that has become amenable to mobilisation and/or problematisation when dealing with particular health issues. Indeed, it is this multiplicity that is time and again highlighted as the predominant characteristic of our so-called 'late' or 'high modern' condition, whether consulting an acupuncturist in London or a biomedical doctor in Hanoi.

Yet, rather than suggest that we should distinguish emancipating and coping subjects as somehow more self-reflexive (than say 'early modern' or 'civilising' subjects), I would argue that it is the 20th century neo-vitalisation of life with quality of life that has obliged modern subjects to a particular kind of permanent self scrutiny as a matter of *ascesis* (cf. Rose 1999). It is a configuration of life optimisation that makes space for, even celebrates, a multiplicity of rationalities and cognitive frameworks (*logoi*) for working on and optimising the bodies and subjectivities that sustain the quality and length of one's life. Yet, it is also a configuration that requires one to subject these rationalities and the practices they promote to scrutiny, to constantly monitor them and see how they hold up, to ensure that they are "rational" and "appropriate", to check whether or not they are in fact helping one to improve one's self as a matter of *ethos*; which is to say it is an always unfinished task (cf. Rabinow 2003). If not, one can be sure that awareness raising campaigns to promote the "appropriate" use of herbal medicines or the "rational" use of antibiotics will be formulated and implemented. It is this that I have alluded to when speaking of the contemporary making up of 'petty engineers of modern life' in Vietnam and the UK through grassroots techniques of awareness-raising, coping and emancipation. Subjects are to be empowered into taking care of their selves, but are also to know when it is appropriate to seek the assistance of a qualified practitioner, whether biomedical, herbal or other. Subjects are also to manage their lifestyles and to adjust behaviours so as to optimise not just their longevity but also their well-being, cognitive coherence, ontological security, vitality, balance and harmony.

* * *

With this chapter we have come full circle. What started as an inquiry into the debilitating effects that modernity has been charged with exerting on our bodies and subjectivities and into the ways in which herbal medicine in Vietnam and the United Kingdom has been mobilised to ameliorate and overcome these side effects, has ended with a discussion on how human subjectivity itself has been governmentalised as yet another one of modernity's many side effects. Central to the revival and renaissance of herbal medicine, I have argued, has been not just the normalisation and disciplining of herbal medicine but also the self-techniques of awareness-raising, emancipation and coping, which have their particularities depending on the ways in which demographic, epidemiologic, socio-economic, biological (including so-called 'esoteric', East Asian or vitalist forms of it), anthropological, sociological and psychological ways of knowing (*moralities*) come to be assembled and invoked in the formulation of sound advice about how individuals can optimise their (quality of) life, providing them with specific ways in which to understand, relate to and act upon themselves (*ethics*). These multiple and interlinked ways of knowing and being permeate both Vietnamese and British cities, villages and hamlets, available not only through 'government-led' health programmes, but just as importantly through popular media, word-of-mouth, family exchanges, herbal practitioner consultations and the like. In both Vietnam and the United Kingdom, as the exigencies of temporal subsistence are joined and perhaps superseded by the vicissitudes of modern living, herbal medicine users are being encouraged and provided with the means to become 'petty engineers of modern life' by way of adopting cognitive meaning frameworks, making 'rational' healthy choices in their daily lives, and planning healthy (be they anti-depressant or anti-imbalance) lifestyles in the name of both longevity and wellbeing. In both countries, herbal medicine has come to be harnessed to treat the side effects of history.

8 Conclusion

Is herbal medicine modernity's latest casualty? We have certainly seen how, during the course of the 20th century and into the current century, the practice, production and use of herbal medicine in both the United Kingdom and Vietnam came to be normalised. In Vietnam, this normalisation has made space for an estimated corps of apprentice-trained traditional practitioners that is comparable in size to that of biomedically-trained doctors. The vast majority of the national population continues to use herbal medicine as a routine part of their medical practices, with age-old herbal remedies passed on from generation to generation, especially by mothers and grandmothers. Village markets stock steady supplies of fresh and dried medicinal herbs and many families grow their own supplies in a corner of their vegetable gardens. Urban pharmacies sell antibiotics side-by-side with industrially-produced herbal remedies and tonics. Official policy is to encourage the use of herbal medicine as a means of not only public health promotion in both rural (against infectious diseases) and urban (increasingly against lifestyle-related diseases) areas, but also to promote national identity formation – *Vietnamese* medicine for *Vietnamese* people. Its practice and use are intimately intertwined with theories and concepts that have their roots in a rich archive of ancient Sino-Vietnamese medical texts, even if in more recent centuries biomedical concepts, norms and products have increasingly come to be deployed in national health programmes. Indeed, so much so that contemporary Vietnamese subjects are described as having to negotiate a dizzying plurality of health rationalities and practices on a daily basis.

By contrast, herbal medicine in the United Kingdom is a medicine of the minority. Although supermarket shelves and drugstore counters are packed with 'natural' herbal supplements and remedies, and although the number of practicing herbalists is on the rebound, the practice and use of herbal medicine is nowhere near as prevalent as in Vietnam. Government policy is to mobilise herbal medicine, primarily as a means of public health protection (as opposed to promotion) but perhaps also as a way of ensuring increased individual choice in the pursuit of wellbeing and good health. Consumers of herbal medicines are encouraged to be vigilant and wary of any outlandish claims by unscrupulous manufacturers or practitioners. And although herbal medicine is one of the most popular forms of CAM, it is but one of an entire plethora of CAM therapies that have recently been

catalogued and hierarchised by various agencies as an urgent public health service in an age of new medical pluralism. The typical CAM user is often referred to as a health consumer, intent on taking matters of health firmly into his or her own hands by shopping around for appropriate solutions to especially chronic and lifestyle-related diseases.

Notwithstanding these marked differences, which cannot be overemphasised, the foregoing analysis has also identified a number of common lines of problematisation. In coming to be remobilised in both countries for the different reasons pointed out, it seems that the practice and use of Vietnamese and British herbal medicine have become a modern affair. In recent decades, herbal medicine has been transformed into a discipline – an expert body of knowledge and a more or less formalised system of training and educating. Concrete measures of modernisation, professionalisation, industrialisation, rationalisation and commodification of herbal medicine have been initiated in both countries. Yet, bearing in mind the modernisation critiques that provided the platforms on which the revivals of Vietnamese and British herbal medicine were launched, this has been a modernisation that has actively sought to defuse risks of alienation and degeneration by insisting on a 'human' or 'holistic' modernisation. Herbal medicinal products can be industrialised and commodified, but only against assurances of adhering to full spectrum extracts rather than single active ingredient isolation and of pesticide-free (not to mention GMO-free) cultivation and contamination-free production. Herbal practice can be bureaucratised and professionalised, but only if this formalisation does not subvert or eradicate the specific theories and concepts of herbal medicine and leaves space for age-old traditions of apprenticeship. Herbal medicine use can be rationalised to safeguard the public from shady products and potentially dangerous effects resulting from unsupervised self medication, but only if this rationalisation does not succumb to reductionist 'quick fixes' that treat herbal remedies as magic bullets. Treatments can be clinically tested to build up an evidence base, but not if this means stripping down person-centred approaches and standardising treatments. It is a constant struggle to counterbalance risks of degeneration and alienation with active initiatives to humanise and maintain a holistic approach when modernising herbal medicine.

In this way, humanisation becomes, not the antithesis of, but rather, a crucial component of modernisation – yet another addition to modernity's growing inventory of *isations* (cf. Armstrong 1983). It is this shift that I have pointed to in suggesting that the 20th century

mobilisation of herbal medicine in Vietnam and the UK has counted on a neo-vitalisation of a 'cold' biology with quality of life. It is a shift that has been facilitated by an ongoing opening up and mapping out of both individual subjectivities and a multiple subjectivity as concrete sites of life optimisation. We saw how this manifested itself in efforts to make herbal practitioner subjectivities amenable to technical public health interventions, by insisting on statutory minimum qualifications, codes of conduct and continuous professional development as a means of preventing the herbal quackery of today – irresponsible, unqualified, incompetent or worst of all unscrupulous herbal practice. We saw it in efforts to account for the efficacy of herbal medicines, not only in terms of bio-physical mechanisms of action of the body, but equally importantly in terms of the bloodless, gutless mechanisms of action of human subjectivities where symbolic efficacy is the key. We saw it in ethno-scientific efforts to map out and document ethnic knowledge systems so as to be able to practically benefit from them. And we also saw it in the swarming of a whole plethora of grassroots techniques of emancipation and coping, including those offered through herbal practitioner consultations, consumer awareness programmes, cultural revival initiatives, self help literature and the like, which provide subjects with concrete means of working on and improving their bodies and subjectivities as a matter of (quality of) life optimisation. Life itself *and* human subjectivity itself are the objects of bio-power today.

Herbal *dispositifs*

How then should we account for the revival and renaissance of herbal medicine in Vietnam and Britain? Having analysed the microphysics of this revival in terms of efforts to regulate, validate and promote the responsible practice, production and use of herbal medicine, it seems to me that the standard reply – which points to the limitations of and/or frustrations with modern medicine, and the subsequent superiority of an epistemologically distinct herbal medicine in terms of both symbolic and bio-physiological efficacy (not to mention economic feasibility) – overemphasises a dichotomy that is very difficult to find in the microphysics of the revival. Practitioners of herbal medicine in both Vietnam and the UK are increasingly trained in the basics of both biomedicine and herbal medicine. Herbal medicinal products are both standardised according to biochemical markers in high-tech laboratories, and preserved as whole plant extracts that can be used alone or in combination with other herbs in the prescriptions of herbal practitioners. Users of herbal medicine can easily navigate between using antibiotics for particular illnesses and herbal remedies for

others. Indeed, as I have emphasised, it is exactly this apparently disorienting plurality that has been diagnosed as defining of the so-called 'late modern' era that both Vietnamese and British subjects are seen to be living in. This is *not* to say that important differences between a biomedical and a herbal medicine approach do not persist, rather it is to say that 'incommensurability' is increasingly being tackled as a hurdle that can be technically overcome in day-to-day healing practices, specifically by targeting the subjectivities of practitioners, researchers and users.

And so, by going to the microphysics of regulation, validation and use in both Vietnam and the United Kingdom, a much more complex account of the revival and renaissance of herbal medicine becomes evident. A number of transformations, reconfigurations and recasts have been necessary components of this revival, resulting in particular and novel herbal *dispositifs* in both countries. What I have argued has been one of the most important recasts to facilitate the birth of 'traditional medicine' in the former colonies and the subsequent birth of 'complementary and alternative medicine' in industrialised advanced liberal countries, resulted from the advent and rise of 20th century social and cultural anthropology, which took the individual and collective lifeworlds and cognitive frameworks of the 'primitive' as its object. In doing so, 19th century evolutionary assumptions, about a teleological progression from immature and simple savages to mature and complex civilised peoples, could be challenged by the possibility of multiple, equally complex and rational worldviews. It is easy to forget how radical a notion this was in anthropology and sociology alike just one hundred years ago. And, as I have shown, it was this shift that would in part provide the conditions for a recasting of 'primitive medicine' into TM and of 'fringe medicine' into CAM. It was also a shift that would contribute to the decriminalising of placebo and the subsequent introduction of symbolic efficacy as an equally significant component of all healing interventions – a shift captured in the sociological assertion that there is more to illness than biology. Finally, and perhaps most importantly, it has also introduced the notion that, in a globalised world, subjects have to negotiate and navigate through a plurality of different worldviews on a daily basis. Indeed this negotiation has become a vital element of the care of the modern self.

What I have argued in this dissertation, then, is that the revival and renaissance of herbal medicine in Vietnam and the United Kingdom cannot be understood without taking into account the *dispositif* in which it has taken place. It is a *dispositif* within which: the

problem of quackery has been transformed into a question of not only 'miracle cures' or dubiously 'esoteric' knowledges, but increasingly also of practitioner competences, qualifications and conduct almost regardless of the therapy in question (although we did see how healers and 'witchdoctors' in Vietnam and crystal therapists and iridologists in the UK, for example, continue to be marginalised today); the problem of efficacy has definitely not been removed from a bio-physiological realm of either biomedical pharmacodynamics and pharmacokinetics on the one hand or herbal vital life forces and energy flows on the other, but to it has been added a cognitive realm of symbolic pathways and coping mechanisms, with a decriminalised placebo effect emerging as the link between the two; and finally the problem of life has been neo-vitalised such that a politics of life itself and a politics of human subjectivity itself are inseparable components of overall operations of a life administering bio-power in both countries. In other words, what should be clear from the foregoing chapters is that what I have described as a governmentalisation of human subjectivities – of both individual lifeworlds and of collective consciousness – has been as important a part of the said revival as the disciplining, rationalisation and industrialisation of the production, practice and use of herbal medicine. Whether Vietnamese and British herbal medicine are better or worse off today than they were prior to their late 20th century revivals is a question, as forewarned, that I cannot claim to have come any closer to answering. The debate, however, as I have shown, is manifestly burgeoning in both countries.

Subjectivity as a modern particularity

Further to these central findings concerning the revival and renaissance of British and Vietnamese herbal medicine specifically, what I have also intended my study to contribute to is the beginnings of a kind of historicising or contingentalising of the modern disciplines of anthropology and sociology. Sociologists have been very keen to highlight the objectifying and looping effects of various forms of expert knowledge, from biology to psychology, medicine, law and economics. What I have begun to ask in this study is how one might introspectively redirect such analytical scrutiny towards sociology and anthropology as modern disciplines themselves. And what I have found is that shimmering through all the plurality, insecurity and disorientation that sociologists and anthropologists have sought to account for since the beginnings of the 20th century, have been *human subjectivities* as a kind of lowest common sociological/anthropological denominator uniting otherwise dislocated and fragmented communities, social movements and individuals

throughout the world. However different their lifeworlds, healing practices or coping strategies might be, what a Namibian sangoma patron, a Vietnamese herbal medicine user, a Dutch oncology patient, or a Mexican traditional healer's client are seen to have in common is a subjectivity.

The question I have put to myself is if Canguilhem was able to generate such unique insight by carrying out archaeological analyses of the biological concepts of regulation, the reflex, the normal and the pathological, would not a similar approach towards anthropological/ sociological concepts of coping, alienation or fragmentation also be fruitful? Moreover, is it possible to approach the disciplines of anthropology and sociology in terms of ways of knowing or 'styles of thinking' and if so what kind of effects might they have for organising particular ways of doing (e.g. health interventions) and in providing possible forms of ethics or ways of being (e.g. as whole persons)? In so many ways, anthropology and sociology have, from their inception as disciplines, been actively engaged in the disciplining of subjectivities – which is to say in systematised efforts of mapping them out, locating mechanisms of their formation and pathologisation, in both their individual and collective forms. To do this, these disciplines have had to, in Bachelard's sense, set forth detailed methods with which to access and chart human subjectivities, including ethnographies, participant observation, semi-structured interviews, opinion surveys, etc. All of this raises the crucial question of whether or not we should revisit what is certainly the central hypothesis of 20th century sociology, namely that modernity, in all its various forms of 'pre-', 'early', 'high', 'late' or 'post-', has been a repressive, destructive and disruptive force on our subjectivities and our societies. Foucault (1978) famously argued that far from having ushered in an age of increased sexual repression ("the monotonous nights of the Victorian bourgeoisie"), modern industrial societies witnessed an unprecedented explosion in scientific discourses about sexuality, practices preventing or condemning certain 'deviant' forms of it as well as public health programmes to raise awareness about its risks. We might well ask, I contend, whether a similar argument pertains to sociology's repressive, alienating and disorienting hypotheses about subjectivity (cf. also Armstrong 1983, especially chapter 12).

This tentative conclusion without question merits further meticulous study, but if there is one characteristic one might choose to highlight from 19th and 20th century anthropology and sociology (often borrowing heavily from or in close alliance with the psy-sciences),

then surely it must be the unparalleled wave of studies intent on demonstrating how subjectivities come into being, how they 'work' and how they can be influenced, pathologised or recuperated. It is during the course of this project that Man's interiority came to be nicknamed 'subjectivity'. One can of course not claim that the problem of the self is somehow unique to modernity, any more than one can suggest that taking care of the self by attending to some kind of interiority (soul, spirit, mind) is. Very practical and concrete examples of self care advice can be found in thousand-year old records found in both East Asia and Europe (Foucault 1985; Unschuld 1985). Yet what I am arguing is that the ways in which these interiorities came to be known, mapped out, worked upon, and harnessed in overall efforts to secure human healing and progress are novel; it is the politics of human *subjectivity* that is a particularity of modernity. What is more, as these individual and collective subjectivities came to be charted and monitored, they also became amenable to manipulation and intervention though techniques of self-help, patient empowerment initiatives, awareness-raising programmes, cultural revival campaigns and human capability initiatives, i.e. the governmentalisation of human subjectivities has made it possible to govern *through* subjectivities (see Rose 1996b).

In suggesting this, I am of course not saying that processes of modernisation, industrialisation, bureaucratisation and technologisation have not had their side effects – some of which have been atrocious to say the least. The point I am making is conceptual, but no less important for it: subjectivity, it seems, is a particularity of modernity in the sense that we have witnessed an explosion in systematised efforts to circumscribe and characterise it which in turn have resulted in the formation of expert bodies of knowledge (sociology, psychology, anthropology) that can and have been harnessed and mobilised in governmental programmes to shape the conduct of ourselves and others. To borrow from Latour (1987; 1986), a future avenue of research that awaits following this dissertation is to investigate "sociology in action" and to characterise "field life".

Symbolic efficacy

Related to these reflections on the governmentalisation of human subjectivities has been the centrality that symbolic efficacy as a sociological/anthropological concept has had in my analysis. It is clear that optimising temporal life today is not only about engineering our vitality in the sense of sustaining, normalising or enhancing our bodily capacities of biological subsistence, we are also engineering our subjectivities in the sense of

developing, emancipating, recuperating or grounding our capabilities for a 'full' psychological, sociological or anthropological existence. 'Mere' subsistence is not sufficient for a 'good' life today, which instead is increasingly defined in terms of its *quality*. And it is in this connection that symbolic efficacy is key. There are of course, as I have stressed throughout, direct linkages between a politics of life itself and a politics of human subjectivity itself, such as a decriminalised placebo effect which attributes concrete and measurable biological effects in the body to symbolic restorations of cognitive order, to treatment-intervention-engendered hope, or to culturally-learned expectation (e.g. go to doctor, get better). Conversely, equally measurable, but negative biological effects in the body are often attributed to psychosomatic mechanisms of action that are seen to transfer cognitive states of terror, sadness, stress or anxiety into corporeal disruptions and pathologies. What is more, recent developments in psycho- and neuropharmacology have begun mapping out biological pathways for psychological pathologies, including depression, anxiety, shyness and attention-deficit/hyperactivity disorder, and by implication also their converses in happiness, wellbeing, confidence and concentration.

Notwithstanding these many forms of interconnections between our vitality and our subjectivity, it is also clear that a bloodless, gutless realm of human subjectivities where symbolic efficacy is invoked to describe mechanisms of their formation and normal working remains. It is within this realm that our quality of life is to be found, measured and intervened upon, even if this includes pharmaceutical, surgical or herbal forms of intervention. The maturing, emancipating and coping subjects that the disciplines of psychology, sociology and anthropology have called into being are a requisite object of quality-of-life-enhancing interventions. With herbal medicine, as we saw, the object of a healing intervention is not only to rebalance the vital rhythms or flows of the body, it is also to provide herbal medicine users with a 'story' or cognitive framework through which they can relate to their particular ailments and conditions and adjust their lifestyles accordingly. Indeed, emotional and physical well-being are considered inherently interlinked and inseparable for it.

Now, as I have argued, this mobilisation of symbolic efficacy in herbal healing interventions has relied on a governmentalisation of human subjectivities that anthropology and sociology have in large part contributed to and continue to do so, together with the psy-disciplines. Indeed, I have suggested that anthropology and sociology (their medical sub-

disciplines in particular) can be usefully approached in terms of ways of knowing or 'styles of reasoning', which have in turn offered possible ways of doing and being. That is to say, civilising, emancipating and coping subjects have in a sense been side effects of the governmentalisation of human subjectivities as anthropological/sociological ways of thinking have pervaded the practices and health interventions of herbalists, doctors, social workers, self help manuals, etc. Not as the only, or for that matter most important, ways of thinking, but rather as one group of rationalities/systems of practices among many others. As we saw, a single herbal consultation can easily involve vitalist, neurochemical, psychological, sociological and phytochemical rationalities and practices.

East and West

A final set of reflections on my findings concern my choice of comparing an 'Eastern' with a 'Western', or put in another way a 'developing country' with an 'advanced liberal' context. The division of labour that to a certain extent persisted between an anthropology of the primitives and a sociology of the modernised/civilised up until the early 20th century has all but dissolved. If anthropologists came home from the tropics, then sociologists have increasingly ventured out into 'the orient'. Yet curiously enough, comparative sociological and/or anthropological research tends to remain geographically, culturally or socio-economically clustered. In the field that I have studied for this dissertation, such clustering is evident in the distinction between TM and CAM. Traditional Medicine is found in 'developing countries' whereas Complementary and Alternative Medicine is found in industrialised countries. When I have attended conferences they have either been CAM conferences where participants have primarily carried out their research in industrialised country settings, even when researching, for example, Traditional Chinese Medicine. And conversely, to interact with fellow researchers interested in Traditional Medicine I have had to attend conferences with titles ending with "in Asia".

What I hope to have demonstrated with this study is that there is no other reason than a researcher's own particular interests that should prevent comparisons 'across' the cultural, socio-economic or geographical divide suggested by the TM-CAM division. I am of course fully aware that in suggesting this I am opening myself up to charges of 'Euro-' or 'ethnocentrism'. Indeed there are perhaps some who would argue that the foregoing analysis is nothing but a typically Eurocentric attempt at accounting for traditional medicine practice and use in Vietnam. I would of course not only vehemently oppose such

a characterisation of my analysis, but would also point to one of the key arguments that I have been making throughout. One of the most important recasts that I have described has been the challenging of an evolutionary anthropology, which had its heyday in the 19th century, by a social and cultural anthropology in the early 20th century. The effect of this challenge was to flatten racist civilisational hierarchies through an insistence that we are all human subjects, regardless of cultural, social or geographical origin. We may well ascribe to different worldviews, adopt different cultural practices in efforts to, for example, heal ourselves, or enjoy different forms of food, but we are nonetheless all subjects whose practices are informed by worldviews, cultural values and social norms, as different as they may be. Indeed, it is exactly in its effort to map out these *different* worldviews, collective cognitive frameworks, and social norms that anthropology and sociology have reinforced this universally *human* subject.

If anything, I would argue that Vietnamese regulators, herbal practitioners, doctors and community workers are well 'ahead' of their British counterparts when it comes to modernising, rationalising and industrialising the production, practice and use of herbal medicine. While distinctions between western and Vietnamese medicine certainly persist to this day, there has been a consistent call to "unify" and "collaborate" – reflected in the ways in which public health delivery is organised. Vietnamese chemists, botanists and pharmacologists have been travelling the countryside since the 1960s to collect folk remedies, and to collaborate with apprentice-trained practitioners in identifying medicinal plants and in modernising traditional remedies. In the United Kingdom, the Ethnomedica-research group with a similar mandate was set up as recently as 1999. Moreover, while practices of self-regulation by British herbalists date back to the mid 19th century, it was not until 2001 that a Herbal Medicine Working Group was set up to investigate the possibility of statutory recognition for herbal practitioners. In Vietnam, as we saw, traditional herbal practitioners have been actively recruited into the public health delivery system since the late 1950s. Now, to suggest that Vietnamese herbal practitioners, scientists and government officials have been somehow duped into modernising, rationalising and industrialising their herbal medicines by a hegemony of 'western rationalities' is in my view to completely miss the point, if not outright condescending. As already emphasised, whether herbal medicine in Vietnam is better or worse off following six decades of modernising, rationalising and industrialising or whether it could have been done better are questions that cannot be concluded on the basis of my analysis. What I can say without hesitation is that these

processes have been robustly and actively pursued by herbalists, doctors and government officials alike – not without disagreement or debate, but pursued nonetheless as described in my analysis.

Histories of the present and their limitations

In chapter 2, I made a point of distinguishing a history of the present approach to investigating the revival of herbal medicine in Vietnam and the United Kingdom from those of a sociology of health and illness, a sociology of professions, and a sociology of knowledge. In doing so, I wanted to emphasise that I would be asking a different type of question than would have been posed had I chosen one of these latter approaches. I also argued that the critical contribution my study would make would be one of troubling self-evidences and historicising practices rather than exposing shams or identifying shortcomings. As a direct consequence, there are of course many aspects of traditional herbal medicine in these two countries that have not been covered in the preceding chapters. I have not, for example, provided a detailed analysis of the regulatory and policy frameworks and processes within which herbal medicine has been mobilised in each of the countries. This would have entailed mapping out and following the processes of policy formulation, implementation and review. I could have spent many more hours speaking to Ministry of Health officials, and sifting through many more pages of legislation and policy proposals than I have. I could also have written an entire dissertation on recent efforts to professionalise and organise local district level associations of traditional practitioners in Vietnam or on ongoing efforts to unify herbal practitioners (whether Western, Chinese, Tibetan or Ayurvedic) in the United Kingdom under one umbrella professional association.

Neither can I claim to be at this time an erudite expert in the teachings and texts of either Sino-Vietnamese medicine or western herbal medicine. I could certainly have committed myself to a much more in-depth immersion in the conceptual universes of Vietnamese and British herbal medicine and the medical texts upon which they have been built up. This would have entailed many more exchanges with herbal practitioners, and perhaps even concerted efforts to begin training myself in the art of herbalism. In the same way, I could also have concentrated my entire fieldwork on the phytochemical laboratories in which pharmacological work to understand the workings of herbal medicines and pharmaceutical work to improve extraction and production procedures are taking place. I could have followed the trials, errors and successes of the scientists and herbalists in the laboratories in

a much more detailed way, attempting to understand how they arrive at the findings they do, errors made along the way, and new challenges arising from their work.

And finally, without having carried out ethnographic field observations and interviews I have of course not been able to provide a "patient's eye view" of herbal medicine use, its cultural meanings, the innovative ways in which people use herbal medicine in their day-to-day healthcare activities, or the functions it fulfils in generating individual coping strategies. It would have been fascinating, for example, to have identified a rural village in Vietnam where the "Doctor at Home" programme has been introduced and spent time looking at the everyday ways in which such programmes are adopted and/or rejected. Similarly I have not spent sufficient time with herbal practitioners in their practices observing the ways in which they interact with their patients, the challenges they face when working with biomedical doctors, or the microphysics of the power relationships that are emerging out of ongoing professionalisation efforts, to be able to provide a "practitioner's view" on herbal medicine in the two countries in question. With so much happening in terms of the professionalisation of British herbal medicine, it would undoubtedly have been rewarding to spend more time delving into the practicalities of this process, as well as the ways in which it is being received and debated.

As I have already highlighted, the point to be made is that each of these limitations that have arisen on the back of the methodological choices I made to begin with, suggest fields of study which merit monographs in themselves – and indeed there are plenty of researchers who in fact are carrying out such studies. As such, a more pertinent point to reflect on when discussing the limitations of my approach regards the analytical findings and conclusions that I have summarised above. What is it that my study can tell us about British and Vietnamese herbal medicine and just as importantly what is it unable to conclude? My aim has been to establish the contours of the conditions of possibility that can help us to explain ongoing efforts to mobilise and revive British and Vietnamese herbal medicine. How have these efforts become possible? At the same time, I have also aimed to demonstrate that these efforts inevitably entail liabilities as well, and that one of the self-reflexive components of these efforts has been exactly to try and offset some of these liabilities by insisting on humanised and holistic processes of modernisation. This is a very different critical task than that which is perhaps characteristic of the sub-disciplines of medical anthropology and medical sociology, which have often explicitly worked to

demonstrate the shortcomings of a particular form of medicine (usually biomedicine) while advocating more 'holistic' or 'socio-culturally grounded' forms of medical intervention. The links between medical sociology and medical activism, as I have noted, are intimate.

Nevertheless, it is of course standard fare to be asked of and held accountable for the normative contributions that academic endeavours like this current study deliver. And to answer this, I would highlight the conceptual moves proposed in the preceding chapters much more than any kind of practical reforms or improvements of regulatory or healing interventions that concern British and Vietnamese herbal medicine. As I demonstrated in the beginning of this dissertation, incommensurability between the modern and the traditional, biomedicine and alternative medicine, or holism and reductionism have permeated much of the research and policy work done in this field. If anything, this study has shown that, first of all, incommensurability becomes increasingly difficult to discern the further you delve into the microphysics of traditional herbal medicine. And, second of all, to the extent that there are incommensurabilities, these are increasingly being tackled and addressed as technical hurdles to be overcome. Perhaps this point would not have been as accentuated as it has been in my study had I chosen crystallography in the United Kingdom and traditional healing in Vietnam as my empirical sites rather than herbal medicine, or had I chosen to seek out those 'dissident' voices who resist all efforts to "combine" modern and traditional medicine in Vietnam, or to "professionalise" herbal medicine in the UK. Nevertheless, it should certainly be clear from my analysis that that which is celebrated as 'holistic' and 'human' has objectifying effects in the same way that a 'reductionist' and 'mechanistic' biomedicine is seen to have objectifying effects. And similarly, while traditional and alternative medicine are often highlighted for their subject-centred approaches to healing, biomedicine and the various theories of life that it encompasses without question also have subjectifying effects.

And so, while one of the crucial limitations of a history of the present is its inability to provide concrete and stable proposals for reforming, improving or mainstreaming that which it studies (not least because any such proposals would be instantly open to genealogical and archaeological scrutiny), one of its most important contributions is the kind of 'attitude' that it brings to the critical task. It is not about breaking down or exposing the insidious effects of various power-knowledge constellations and the ontologies they engender, rather it is to bring a certain humility and deference to these assemblages,

whether they derive from a ‘hegemonic’ biomedicine or a ‘subjugated’ alternative medicine. Deference, because these assemblages of power-knowledge relations will always have their side effects.

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