Re-presenting herbal medicine as phytotherapy: a strategy of professionalisation through the formation of a 'scientific' medicine.

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The candidate confirms that the work submitted is his own and that appropriate credit has been given where reference has been made to the work of others.

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Abstract

Previous research into complementary and alternative medicine has failed to accord each form of alternative medical intervention individual significance. This research considers medical herbalism in Britain and investigates the re-presentation of its knowledge within a scientific framework as a strategy in a process of professionalisation. Data were gathered from herbalists' own statements that provided the answers to how? and why? this occurred. Whilst it is suggested that much science is heavily influenced by its social and cultural environment, the tenacious portrayal of biomedicine as science is taken as accepted orthodoxy. Dolby's model, whereby unorthodox science assumes the features of orthodox science to become accepted as science, is forwarded as an explanation of how herbal medicine has been re-presented as phytotherapy and therefore 'scientific'. The influences of the sociocultural environment and the sociopolitical environment on herbalism's recognition and acceptance by both the state and conventional medicine are suggested as explanations of why phytotherapy has been promoted by some herbalists.

It is noted that such transformative measures have not radically affected the professional practice of medical herbalists, nor are they universally welcomed. The anomaly between institutional education of herbalism in terms of phytotherapy and the continuing practice of herbalism as a 'tradition' is noted. The relative identities of practitioners — with a cultural identity — and herbal institutions — with a social identity — is suggested as the explanation for the discontinuity between institutional knowledge and actual practice. It is also argued that medical herbalists have an element

of altruism in their practice that is noteworthy beyond an assumed professional service orientation. Herbalists' differences of view regarding the acceptability of promoting phytotherapy as a route to recognition and acceptance appear to be subordinated by fears and anxieties about possible future government legislation and EU harmonisation regulations.

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Chapter 1 — Introduction

Medical herbalism has, perhaps, the longest history of medical strategies though it seems to have declined in credibility since the more scientific principles associated with biochemistry and pathology gained acceptance in and around the 19th. century. In more recent times it survived as common knowledge of folklore and 'old wives' tales' though there have always been a number of practitioners regarding it as a specialised knowledge for medical applications. The contemporary prevailing belief is that herbal medicine is a synergistic use of specific plant parts (often in combination with other specific plant parts) that aid the body's own natural healing forces to be effective. In common with several other medical strategies, herbalism seeks to treat the individual: the individual as a person with a physiological environment, a social and familial environment, an emotional environment, a mode of life, and a history — in short, it could be described as an holistic approach.

Within recent decades herbal medicine has had a resurgence of interest and popularity amongst many people. This research has two specific aims, the first is to record some of the recent history of herbal medicine and analyse current attitudes to herbal medicine expressed by herbal practitioners as individuals and expressed by professional associations as discrete communities of herbal practitioners. The second aim is to

integrate considerations of herbal medicine as a knowledge system and as a professional practice in Britain. The knowledge of herbal medicine has an ancient history but in recent decades has become subject to re-formulation and re-presentation by some herbalists who have apparently sought to relate herbal medicine to the 'sciences' of biomedicine and pharmacology. Herbal medicine as a practice also has an ancient history that has become estranged from orthodox concepts of primary medical strategies. The temporal nature of relocating herbal medicine as a knowledge and as a practice cannot occur in isolation from social existence within a society. Social existence is continually (though often imperceptibly) changing; such a process of change is influenced and shaped by many things including politics, economy, culture and religion. These same factors have also contributed to the location of herbal medicine within contemporary British society. Elements of the sociopolitical environment and the sociocultural environment will be argued to be strongly influential in representing herbal medicine in a more scientific form as phytotherapy, and strongly influential in the professional practice of herbalism. Thus this research aims to be more of an analytic description than a theoretical explanation of herbal medicine's popularity, efficacy, or continued existence. It follows earlier work by Whitelegg (1994) referring to paradigm changes in science in relation to alternative medicine and the work of Cant and Sharma (1996a) which considered adjustments to homeopathic knowledge amongst homeopaths as a strategy of professionalisation.

With some other forms of complementary and alternative medicine (hereafter termed CAM, following Coates & Jobst 1998), herbalism is still generally considered to be outside the mainstream orthodox strategies of healthcare that may be termed medical

science. Such unorthodox therapies and medical strategies have been characterised in four categories by Pietroni (1991). Firstly, complete systems (e.g. herbalism, homeopathy, naturopathy, Ayurvedic) have a comprehensive theoretical background and are able to treat most presenting conditions. They very often have their own explanation for causes of disease and mechanisms for cure and their own unique treatment approaches. Secondly, therapeutic strategies (e.g. massage, reflexology, aromatherapy) assist in the ease of discomfort and the promotion of perceptions of well-being. A third category, the self-care approach, gives the patient skills in practices to take care of themselves, for example, yoga, meditation, and relaxation therapy. The fourth category relates to alternative diagnostic methods that may be used by orthodox practitioners, homeopaths, herbalists, nutritionists (e.g. iridology and muscle-testing).

Although some sociological research has been done regarding various alternative therapies (including Bakx 1991, Saks 1992, Cant & Sharma 1995, Tovey 1997), none has specifically focused on herbalism. Any references to herbal medicine in academic literature seems to be lost in general discussions of alternative medicine as a heterogeneous whole. Apart from Griggs' (1997) scholarly recording of the history and contemporary developments of herbal medicine in Britain, analytic descriptions have been almost absent and any theoretical analysis entirely absent. It is suggested that considering CAM as a heterogeneous whole denies the subjectivity of perception of CAM therapies. If CAM, as appears to be the case, usually refers to several various therapies from acupuncture to the 'laying-on of hands' then each person's personal history and precognitive perceptions may dismiss some CAM therapies as 'worthless mumbo-jumbo'. This is a failing in some previous research because it hinders

considerations of CAM; it is perhaps difficult to consider various shades of grey in terms of black as accepted orthodoxy and white as unaccepted unorthodoxy.

The study is located within a theoretical framework of professionalisation processes of occupational control and development. Following Johnson (1972), Abbott (1988), and Cant & Sharma (1995) professionalisation is here considered as a process over time rather than a discrete step in occupational development. This continuing process of control and closure of occupations is interrelated to the sociocultural location of those occupations. The sociocultural location of professional occupations is dependent on a reciprocity of interests with governments that not only highlights the need for professions to receive state sanctioning, but also illustrates Foucault's idea of governmentality whereby professions are a necessary structure in the governing of a population (Foucault, 1979). The study also refers to theories that knowledge may be a social construction but the study acknowledges the empirical reality of medical science. Whilst there is much academic discourse regarding the very nature of science as a concept and the acknowledgement of multiplicities of sciences, it is still useful to refer to science thematically. Although this research is located firmly in a constructionist view of science, medical science would appear to be tenacious in its portrayal and self-perception as authority on an objective medical reality. Medical science also seems to illustrate Bourdieu's concept of 'cultural capital' that helps define orthodox and heterodox — the accepted and the rejected (Bourdieu, 1990). Dolby (1979) offers a model whereby rejected knowledge becomes accepted within orthodoxy. His model, in which rejected knowledge assumes the features of orthodox knowledge, is forwarded as an explanation of how herbalism has changed in recent years.

Upon initial investigation into herbalism as one form of alternative medicine it became apparent that herbal medical knowledge has recently been re-formulated and re-presented as 'phytotherapy' by some herbalists. This prompted several questions. How has this occurred? Why has this occurred? How does knowledge, re-formulated or not, affect herbal practice? Has the socio-political structure of orthodox medicine forced herbalism to be more aligned within a biomedical paradigm, or have herbal practitioners initiated actions as agents of their own development as professionals? Can those herbalists who welcome such a change be identified? What effect has it had on the professional community of herbal practitioners? Is an ideological division discernible?

The research demonstrates the construction of phytotherapy within the parameters of scientific knowledge and therefore provides evidence for a constructionist theory of knowledge. The research also offers an example of Dolby's (1979) theoretical model of orthodoxy's acceptance of rejected knowledge. By focusing on herbalism as a putative medical profession, the research contributes to theoretical understanding of occupational development as a process of professionalisation. As a case study the research illustrates developments and processes in the sociology of knowledge and illustrates the impact of these on a profession. More specifically, it makes an original contribution to an understanding of the current professional environment within herbalism. Also, for anyone researching CAM within a, sometimes, confusing array of complementary and alternative practices, it gives significance to one alternative medical practice and provides a deeper understanding of it.

In Chapter 2 I review discourses relating to professionalisation and scientific knowledge to clarify concepts on which the research is based. I also briefly describe herbal medicine within a context of CAM and in relation to orthodox medicine. Chapter 3 describes research methods of textual analysis, questionnaires and interviews. Textual sources are listed, sampling frames described and institutions which were deemed relevant to approach for information are noted.

Chapter 4 uses textual references to phytotherapy in arguing that phytotherapy has been represented as a science. The language and form of presentation of phytotherapy is shown to be almost identical to that of medical pharmacology. This explains how phytotherapy has been formulated as a science. Responses from herbalists indicate that such a representation of phytotherapy as science is discerned by many herbalists and either welcomed or decried. The theoretical model of a group actively adjusting their knowledge claims to accord with orthodoxy is tested against herbalists stated views on why phytotherapy has emerged. The influence of Britain's membership of the European Union is considered as a powerful structural factor in the promotion of phytotherapy.

The professional community of herbal practitioners is considered in Chapter 5 with information from herbal practitioners used to describe their professional practice and to reveal an element of professional practice that is often overlooked or dismissed by contemporary studies of professions. Altruism is often dismissed through a Kantian idea that altruism is part of the person's inner character or overlooked because professions serve the public good anyway. The application of specialised knowledge to practice is considered as a discontinuity between institutional knowledge and local

practical knowledge. It is suggested that an internal cultural identity informs the local and idiosyncratic practice of medical herbalism whilst an external social identity of herbal institutions as knowledge-holders portrays a theoretical knowledge unaffected by the immediacies of practice.

In Chapter 6 the sociopolitical environment for medical herbalists is considered. The network of scientific advisors, healthcare institutions, government, and the population is described in Foucauldian terms of 'governmentality' (Foucault, 1979). Interprofessional politics between medical herbalists and the institutions of orthodox medicine is reviewed and contemporary developments towards state acceptance and registration are considered. As a heterogeneous community herbalists have a variety of viewpoints regarding state regulation and any possible location of their profession within healthcare. Differences within a community may not be rare or surprising, but as a community of professionals seeking state registration herbal practitioners may have to accommodate any internal differences.

In the concluding discussion I relate the research findings to theories of knowledge construction and professionalisation. Does theory adequately explain recent developments in herbal medicine and what theoretical implications may be drawn from this research? Does it seem possible that any rejected knowledge can gain orthodox acceptance by adopting the appearance of science? Can other forms of CAM be compared to herbalism in terms of professionalisation — or is the process of professionalisation unique to each occupation? Do herbalists express a difference of opinion about phytotherapy that may be considered a division?

Chapter 2 — CAM, Professionalisation and Medical Science

This research attempts to discover how and why some medical herbalists have re-formulated, or re-presented, their knowledge to become more aligned with the orthodoxy of a dominant paradigm of scientific medicine and how this relates to the location of their professional status. It is based on an assumption that orthodox medical professions have a dominant influence in legitimating systems of medical treatment, and that herbal medicine is generally perceived by orthodox medicine as unscientific. Medical professions have a socioculturally acclaimed status that may be, at least partially, engendered by respect for an expertise derived from knowledge that is considered scientific — but scientific knowledge itself is subject to epistemological debate.

To inform and locate one's research within established theories and the application of those theories in previous research it is necessary to refer to existing literature that is pertinent to one's research. In this way, depending on the research question, it may be found to be a veritable mountain of literature that one is able to refer to. Generally, theoretical literature is abundant, but the pertinence of previous applications of theory to one's specific research question may be limited.

Although there is a growing body of literature concerning complementary and alternative systems of medicine, herbal medicine as a specific medical system, has not been subject to much study. The number of books describing herbal remedies has dramatically increased within the past decades, but literature that analyses herbal

medicine or compares it with other systems of medicine has only shown a moderate increase. There is much literature from outside Britain (notably the North American continent) that relates to a discourse on herbal healing including Traditional Chinese Medicine, refining the focus to concentrate on European herbalism reveals very few sources. In the context of the sociology of medicine, herbalism is just one of many alternative systems that are currently being accommodated within a more comprehensive consideration of healthcare practices. This makes this research highly selective in its focus but illustrative in a wider context of sociological studies of professions and the sociology of knowledge.

Current healthcare in Britain is becoming more diverse in a medical marketplace that appears to be expanding. Complementary and alternative medicine is becoming more widely available and, in some few cases, wholly or partially integrated with orthodox medical practice. Orthodox and complementary practitioners have commented on such pluralism though usually from two perspectives; a perspective of limited acceptance, and a perspective of crossing closed boundaries. Both perspectives seem to be associated with ideas of what constitutes the medical professions and the controlling power of professions.

CAM (Complementary and Alternative Medicine)

The increasing popularity of alternative medicine within the past three decades has promoted an academic interest in alternative medicines, not least because it seems to be a world-wide phenomenon of many western societies. Salmon (1984) refers to a variety of alternative medical systems practised in the USA. MacLennan et al (1996) noted the large amount spent on alternative medicines in Australia and question the efficacy of alternative therapies. Borkan et al (1994) refer to the increase in popularity of alternative medicine in Israel; Murphy & Kelleher (1995) reported on the use of 'folk' and alternative medicine in an Irish community; Fisher & Ward (1994) reviewed the popularity and practice of alternative medicine in Europe.

Beyond these examples, other writers seem to validate alternative medicine as noteworthy beyond medicine. Capen (1997) notes the legal aspect of practising alternative medicine and the need for the legal profession to be aware of possible litigation involving alternative practices. Cottrell (1996) reports that drug companies are reacting to the growing popularity of herbal medicine and selling naturally derived drugs alongside the usual chemical synthetics. Long et al (1995) describe strategies for researching literature that relates to complementary medicine, and methodologies for researching into complementary medicine are considered by Vincent and Furnham (1997). A dictionary of alternative medicine has been produced (Segen, 1998), as have guides to careers in complementary medicine (Brown, 1994; Lyons, 1997). Complementary practitioners' perceptions of their role in Britain's healthcare has been

studied (Cant & Calnan, 1991; Tovey, 1997b) and the effect of complementary medicine on the orthodox medical professions considered (Saks, 1994).

Systems of healthcare, and practices that are defined as acceptable within healthcare, have changed throughout recent history. Inglis (1979) provides a survey of the development of various alternative therapies and medical systems. He charts some of medical orthodoxy's conflicts with the non-orthodox — the unproven, the unbelievable, and the unacceptable; some of which eventually became proven, believed, and accepted. Inglis mentions the strategies of data manipulation to exclude evidential support for homeopathy used in the cholera epidemic of 1854 (p.48) and the suppression of a BMA report in 1892 that confirmed hypnosis as an effective form of treatment (p.65). Unorthodox beliefs and practices were perceived to be 'quackery' and therefore only worthy of attention in matters of exclusion from the orthodox.

Saks edited a comprehensive collection of contributions that described aspects of complementary medicine in Britain (Saks, ed., 1992). Intended to be of especial interest to social scientists the contributions note the history of British medicine, the current location of complementary medicine in British healthcare, and possible futures for complementary medicine. The possible futures for complementary medicine related in this book are somewhat negative in regard to possible integration with orthodox medicine. West notes that only China and Nepal have "managed truly to integrate Western orthodox medicine with other systems" (West, 1992, p.207). Huggon and Trench suggest that it is necessary for groups of complementary practitioners to organise themselves with cognisance of European Community policies of healthcare if

they wish to be legitimated (Huggon & Trench, 1992). Throughout the book a dominant theme is the discretionary power of established medical orthodoxy in deciding what strategies may be considered acceptable within Britain's medical system.

Several writers have described CAM as a sociocultural phenomenon that affects perceptions of available healthcare (e.g. Pietroni, 1991; Sharma, 1993; Saks, 1995). Of direct relevance to this research several writers have considered CAM in relation to the professions of medicine and how CAM practitioners have engaged in a process of professionalisation. For example, Saks (1992) described medical orthodoxy's acceptance of acupuncturists as professionals when convinced of acupuncture's efficacy and the degree of study needed to become an acupuncturist. Cant and Sharma (1995) noted the different stages of professionalisation in chiropractic, reflexology, and homeopathy. Nicholls (1988) described a history of the professional relationship between homeopathy and orthodox medicine and refers to the political nature of the interface between alternative medical systems and orthodox medicine in the history of homeopathy. Cant and Sharma (1996a) have focused on changes to representations of homeopathic knowledge as a purposeful strategy in professionalisation. Comparisons may be drawn between homeopathy's process of professionalisation and herbal medicine's apparent need for recognition as a professional practice. Cant and Sharma describe changes to the way that homeopathic knowledge has been represented and relate those changes to attempts by groups of homeopaths for professional recognition. This appears to be similar to recent developments in herbalism where "part of the professionalization process has required changes to the content and transmission of . . . [herbal] knowledge (Cant & Sharma, 1996a, p.587). Cant and Sharma (1996b) also

considered the aspects of knowledge and practice in CAM that may lead to medical and popular acceptance. In this respect they regard complementary medicine's knowledge within the sociology of knowledge and, as it is a knowledge put into the practice of healthcare within society, consider it of some importance in relation to social policy.

The medical professions have also noted the increase in popularity of complementary and alternative medicine. Alpert (1995) in an editorial for *Archives of Internal Medicine*, suggests an open-minded approach in considering alternative therapies noting that much orthodox practice originated in what are now considered alternatives. He further suggests that physicians should "avoid hubristic and arrogant attitudes toward alternative medical practice because one might be embarrassed by the subsequent demonstrations of their clinical efficacy" (Alpert, 1995, p.2385). Based on a US study, O'Connor (1995) also argued for alternative medicine to be taken seriously and decried an orthodox view of cultural evolutionism with alternative medicine being based on superstitious errors or quaint survivals of less enlightened times. Kent (1997) echoed Spigelblatt et al (1994) by warning Canadian doctors that alternative medicine cannot be ignored as the number of patients seeking non-orthodox therapies is increasing. Eisenberg (1997) notes the demand for alternative medicines and proposes strategies of discussion and record-keeping to monitor use of them. Ernst (1995) reviewed complementary medicine in Britain and suggested that some misconceptions may arise from a less than objective perception of orthodox medicine and complementary medicine.

Apart from literature that seeks to promote herbalism, most of it written by herbalists, references to herbal medicine in more academic literature seems to be lost in general discussions of alternative medicine as a heterogeneous whole. Restricting the focus of attention to reports of UK research, as the present concern is herbal medicine in Great Britain, does not reveal a different pattern. For example, Thomas et al (1991) studied the characteristics of patients using non-orthodox medicine in Great Britain. Most had musculoskeletal problems and used alternative medicine as complementary to orthodox medicine. There have been several other studies into the efficacy of alternative medicines, sometimes as an overview (Vincent et al, 1995), or specifically relating to an ailment (e.g. cancer, Downer et al, 1994; asthma, Lewith & Watkins, 1996). There are a few references specifically relating to herbal remedies — Bossuyt & Doomsgossens (1994), Cott (1995), White (1995), Phillipson (1997), and Harrison (1998) — though very few that report studies of the efficacy of herbal remedies. Here I draw a distinction between studies of herbal remedies and pharmacological studies of herbal material used in herbal remedies.

One study that sought empirical evidence for the efficacy of a herbal remedy was reported by Mills et al (1996). It was a double-blind study of 82 arthritic subjects randomly assigned to one of two groups — one group given a placebo, the other a herbal remedy for arthritic and rheumatoid conditions known as 'Reumalex'. For two months prior to the trial and during the trial period (also two months), monthly questionnaires and subject's diary entries were used to produce a clinical scoring measure. A small improvement in symptomatic relief was recorded and the authors conclude that Reumalex had some effect as a self-medication. Whilst a comparative

rarity as a study using scientific methodology in researching a herbal medicine, this work can be viewed as indicative of a growing systematic research into alternative medicines.

The knowledge and practice of herbal medicine originated in pre-history but texts specifically concerning herbal remedies are little more than four thousand years old. The earliest known systematic study and recording of herbal medicine was made by the Chinese Emperor Shennung; his herbal dates from around 2000BC and mentioned the medicinal uses of 365 plants (Mann, 1994, p.111). [i] It is perhaps only in the twentieth century that herbals were published for a general readership and for herbalism to be the subject matter of articles in popular periodicals. [ii]

The published histories of herbalism are very few in number, although there are some notable works which have related to herbalism or herbal knowledge (e.g. Inglis 1979; Brown, 1985; Miley & Pickstone, 1988; Mann, 1994). Focusing solely on herbalism, Lipp (1996) gives a brief historical overview of the traditional use of herbal medicines in Oriental and Occidental societies. Griggs has charted a history of herbalism and has recently revised her original *Green Pharmacy* (1981) to produce an updated history entitled *New Green Pharmacy* (1997). This is a general history of western herbalism written in a popular style yet revealing a thorough scholarship. Griggs recognised in her introduction to *Green Pharmacy* that it "risks being read as a wholesale attack on the medical profession" (Griggs, 1981 reproduced 1997, p.x). Despite the revision, the polemical tenor of her book remains as evidence of a continuing 'wariness' between herbalists and orthodox medicine — a view that is often mirrored in some doctors'

published letters in medical journals. Robbins (1995) provides an introduction to the basic concepts of herbal medicine and its practise. Not only does he explain what herbal medicine is and how it has developed, he describes typical consultations with herbal practitioners, how those practitioners are trained, and offers guidelines on how to find a qualified herbalist. Although now arguably dated — it was originally published in 1993 — the main content of Robbins' book remains valid and relevant. It is also somewhat of a rarity in that it is confined to considering European herbal medicine in contemporary Britain.

As noted previously clinical studies of herbal medicine have been very limited, but herbal remedies and their ingredients have been subject to much more research of a pharmacological nature. During the 1980s several papers on herbal remedies were published in *The Pharmaceutical Journal*, though not all early papers related to herbs used in European herbalism, and in the 1990s papers relating to specific herbs were published. Many have been cautionary and refer to several reports of pathological damage following the use of herbal medicine (again, not all reports relate to European herbal medicines). This caution amongst pharmacologists may have been the prime stimulus for a recent guide for healthcare professionals that has been produced with funding and "strong editorial involvement" by the Royal Pharmaceutical Society of Great Britain (Newall et al., 1996, p.ix). It was reprinted within a few months of its publication which suggests that the book was of more interest than originally thought.

The guide principally consists of 141 monographs on "herbal ingredients found in herbal remedies" (ibid., p.1). . Each monograph is a reductionist analysis of the plant's chemistry and tabulates the quantities of every constituent chemical found in the herb sample. Herbalists also recognise that herbs may have flavonids, sapponines, oils, etc. within them, but do not usually refer to the specific and finely measured quantities of each constituent: to do so would be to deny a central tenet of herbal medicine which considers the whole plant part, often in compound with other plant parts, as a synergistic medicine. Newall et al's analyses are no different to the pharmaceutical industry's historical use of plant material to isolate active ingredients that may be commercially produced. However, their work should not be singled out as evidence of a covert commercial agenda, for it is little different to some herbal association publications. The monograph format of Newall et al closely follows a series of monographs produced by The British Herbal Medical Association from 1967 till they were collated to form the *British Herbal Pharmacopoeia* in 1983. The BHMA is committed to promoting the 'science' and practice of herbal medicine by modern techniques and in this respect has sought to present herbal medicines as biochemically active in a pharmacological sense.

Newall et al's presentation of their guide to herbal medicine could raise questions of the direction in which the authors, and by implication the RPS, wishes to guide healthcare professionals for they are somewhat selective in their data. Regarding the efficacy of herbal medicines the authors state "In terms of efficacy the relevance of *in vivo* or *in-vitro* animal studies, often the only information available, is questionable for any pharmacological properties" (ibid., p.10). These same studies do not seem to be

irrelevant or questionable for any possible toxic properties of herbal medicines. The notes on toxicity regularly refer to such studies but the authors fail to mention that the resultant measure of toxicity is produced by a discredited method that "ascribe[s] a spurious accuracy to a number which is recognised to be of limited value" (ECETOC, 1985, p.2). Where studies of toxicity are limited the authors retain their caution with the oft-repeated warning "in view of the lack of toxicity data, excessive doses should be avoided". I would suggest that the targeted readership of healthcare professionals would already consider an excess of any medicine — even with libraries of information concerning its efficacy, contraindications, side-effects and toxicity — should be avoided. Despite the general theme of negation throughout the book the authors do accept a limited usefulness of herbal medicine, but this is still couched in very guarded language; "Herbal remedies can offer an alternative to conventional medicines in non-life-threatening conditions, providing they are of adequate quality and safety, and are used in an appropriate manner by suitable individuals" (ibid., p.11). Unfortunately the authors fail to elucidate their terminology or the normative factors that would classify a condition as 'non-life-threatening', what is 'adequate' for quality and safety, what manner makes it 'appropriate', and which individuals are 'suitable'. Perhaps it would be overly cynical to suggest that the vagueness of the quoted sentence masks the pharmaceutical industry's commercial interests in selling synthetic drugs and medicines that may be no more efficacious than much cheaper natural products.

The calls in medical journals for open-mindedness, or at least attention to the changing preferences of patients, have been expressed by others who seek a reform of medical

practice to encompass an integrated system of healthcare. Chez & Jonas (1997) reviewed complementary and alternative medicine in the USA and suggest the challenge for orthodox and alternative practitioners is to integrate an evidence-based care plan for the benefit of patients. Elash (1997) reports that because of its popularity in Canada some hospitals now offer alternative medicine if patients ask for it. In Britain, Anderson and Anderson (1987) reported that many doctors were referring some patients to some form of complementary therapy. One model for an integrated healthcare system has been advocated by Featherstone & Forsyth (1996) who describe it as a "Medical Marriage".

Featherstone is a registered medical practitioner and Forsyth is a complementary therapist. Both have been working in a multidisciplinary team at the Forres Centre for Holistic Health Care where they are practising the concept of medical marriage. This is an integrated healthcare system where doctors and complementary practitioners operate the two paradigms of reductionist biomedicine and holism together. In this way they create a much broader spectrum of medical care for the benefit of everyone — doctor, complementary practitioner and the patient. The authors suggest 6 core elements for medical marriage.

1. Patients are complex individuals and are a product of their social and cultural context as well as their natural environment.
2. Health and well-being are the focus of healthcare. Rather than just symptomatic relief, medical professionals should support patients in helping themselves.
3. Patients are in charge of their own care and have the right to take as much control and responsibility as they wish.
4. In treating disease the least harmful intervention has to be provided first. Only if that fails are more invasive measures justified. In effect this means complementary strategies first, then "the technology of orthodox medicine being a back-up or last resort" (p.21).
5. Multidisciplinary co-operation is the best strategy.

6. Everyone working within such a medical marriage needs to have a basic knowledge of the wide range of complementary therapies.

Featherstone and Forsyth's work could be perceived as a utopian vision of ecumenical medicine within a society of harmonious human existence, or it could be perceived as a worthwhile aim for enlightened healthcare professionals. Their first three core elements may be welcome in reasserting the patient as a person and in advocating a holistic view of health, but the fourth element may not be so well received. To suggest that orthodox medicine be relegated to a position of 'last resort' seems to be rather divisive in light of their fifth element advocating co-operation. Practitioners with an awareness of all medical strategies may be an ideal but it will probably remain just an ideal. Surely it is impractical to expect an acupuncturist to be aware that knee-joint pain may be alleviated by herbs, meditation, osteopathy, or surgery when the acupuncturist *knows* that it is an imbalance in the body's 'Chi' that is causing the pain. Similarly, an orthopaedic surgeon *knows* the pain is caused by detached cartilage and his actions are based on this knowledge rather than an awareness of herbal remedies or meditative techniques.

Of a less polemical nature, though still advocating pluralism in healthcare through a diverse healthcare system, is the report from The Prince of Wales's Initiative on Integrated Medicine (Coates & Jobst (eds.), 1998). Although there are some similar themes to Featherstone and Forsyth, the style of presentation is much more academic and its proposals are much clearer. The report, as a discussion document, proposes action in research, regulation, education, and implementation.

It is suggested that research is needed into patients' and practitioners' perception of CAM, the use and availability of alternatives, and the findings from this research should be discussed by specialist groups to define operational criteria. The authors offer suggestions how this should be executed and funded. Regulation was seen as problematic because of the diversity in philosophies and levels of remedial intervention within CAM. It was concluded that self-regulation through unified or paramount associations of each practice could be most effective in maintaining professional standards and safeguarding patients. The need for educational changes has some thematic similarities with Featherstone and Forsyth, but is articulated here as an unfamiliarity of doctors with CAM, and conversely, CAM practitioners with orthodox medicine. Courses in CAM are too diverse to be considered as a whole, some courses may be introductory and of short duration whilst others may be more comprehensive and take several years. Also the lack of independent accreditation for the courses that lead to practice in CAM confounds the level of knowledge acquisition and practical expertise. The report suggests a core curriculum for all students of healthcare that would include basic human anatomy and physiology, an awareness of CAM therapies (echoing Featherstone and Forsyth), counselling skills, and organisational skills. It is only here that the report also alludes to holistic views of patients' health as one element in a core curriculum — a major distinction between this report and the model of a "Medical Marriage". Proposals for action in the implementation of a diverse healthcare system are confined to investigative surveys and assessments of perceived need and current availability of CAM via clinics, health centres, GPs, and complementary health centres sanctioned by District Health Authorities.

This tentative report is less radical than Featherstone and Forsyth's proposed model and could be perceived as arguing for control of CAM training and practice: an implied 'take-over' of CAM by orthodox medicine's standards and rationale of knowledge in practice — similar to the British Medical Association 1993 report *Complementary Medicine: New Approaches to Good Practice*. There are differences though, the BMA report advocated its involvement in regulating the training and practice of complementary medicine as a subaltern medical strategy. Coates and Jobst seem to suggest a more equitable relationship of practices but a convergence in training. It is within their suggestions for a core curriculum that doubts may arise for its acceptance by orthodox medicine. Medical training is already comprehensive, extensive, intense, and arguably requires a special type of person to become a doctor (Sinclair, 1997). Adding to the current training would surely impose even greater requirements of an already select few. Suggestions like Featherstone and Forsyth's 'Medical Marriage' or those contained in Coates and Jobst's report to integrate differing systems of healthcare have to be acceptable to practitioners — especially orthodox medical practitioners given their dominance and effective control of medical practice. In Britain orthodox medical practitioners have established a dominance in the practice of healthcare that empowers them to exclude other forms of practice or to include them.

In 1986 the BMA published a report entitled *'Alternative Therapy'* which considered whether alternative systems had any validity to complement their own orthodox system. The report characterised alternative therapies as "residues from some pre-modern past" and seemed to be concerned with "re-inforcing its own legitimacy as the sole 'Keeper

of the Public Health'" (Bakx, 1991, p.26). By 1993 there had been an undeniable increase in the number of people seeking alternative medicine and a reappraisal of alternative therapies in relation to orthodox medicine. In that year the BMA published another report that proposed its involvement in formulating practice guidelines for alternative therapies. This apparent change of attitude by the BMA is evident in the title of the later report — *'Complementary Medicine: New Approaches* to *Good Practice'*. Herbalism along with other therapies such as chiropractic, reflexology, and homeopathy would seem to be acceptable as *complementing* orthodox medicine rather than *alternative to* orthodox medicine — perhaps especially so if orthodox institutions like the BMA can have some measure of control.

Following the BMA report of 1993 Tovey (1997a) systematically sampled practitioners in homeopathy, chiropractic, reflexology, and medical herbalism. His study showed a marked receptiveness to BMA participation in formulating practice guidelines but also that there was "an almost universal rejection of a major role for the BMA" (Tovey, 1997a, p.58). Whilst Tovey suggests the waning of a distinctive opposition between orthodox medicine and complementary medicine, he does note the differences between systems of complementary medicine that preclude a universal adoption of the BMA's proposals. Tovey further analysed his work to describe the level of professional legitimacy accorded complementary practitioners by medical professionals (Tovey, 1997b). Noting the heterogeneity of roles and status levels within the orthodox medical professions, Tovey reveals a "contingent legitimacy" (ibid., p.1132). Complementary practitioners are more likely to be accepted by nurses and occupational therapists, and more likely to be considered irrelevant by hospital doctors and consultants.

Although Tovey's work is of particular interest in the study of the varying relationship between orthodox medicine and complementary medicine, it may not be an accurate reflection of the relationship. His original paper considered complementary practitioners' attitudes to the BMA report, of his 546 respondents only 149 had actually read the report. The majority of respondents must therefore have been commenting on secondary perceptions of the report. In his second paper the data is derived from complementary practitioners' beliefs in how they think they are perceived by medical professionals. This surely illustrates complementary practitioners' attitude to their relationship with medical professionals rather than any substantive evidence of the reality of the relationship.

Part of the relationship is an apparent wish of medical professionals to have some information about alternative medicines. Fulder (1988) is notable as a text written by a scientist describing the commonalties in various healing practises and arguing for their validity. Rankin-Box (1988) produced a guide to complementary medicine for nurses and the 'caring professions' that demonstrates the continuing interest of health professionals in complementary medicine. Originally published in 1988 it has been reprinted in 1992 and 1994, its popularity may originate in the book's concept of individualised care for patients and that its contents may be taught to patients in an attempt to generate a measure of self care. Lewith (1985) provides a guide for health professionals to various complementary medical systems, describing and providing evidence for efficacy of acupuncture, manipulation, homeopathy, bio-feedback and meditation, and clinical ecology. Micozzi (1996) provides a similar guide to Lewith's

but based on a study of alternatives in the United States. A guide (funded and published by The College of Health) by West (1984) describes several alternative therapies including herbalism and provides addresses of relevant institutions associated with these therapies where further information can be obtained. It is noteworthy that none of the above guides explicitly refer to complementary medicine as a challenge to orthodox medicine whilst some medical sociologists perceive it as one of a number of challenges to medicine (Gabe et al, 1994).

Orthodox medicine has, perhaps, been viewed as an enterprise devoted to providing the best management of society's health and well-being. The medical professions have been associated with an ethic of altruism coupled to an expert knowledge that has lent them an air of infallibility and an unquestioned sociocultural status. In recent times the medical professions have been subject to several changes within their practice and within society (Lupton, 1997). Gabe et al (1994) edited a collection of chapters that considered these changes and how they could be perceived as challenges to medical professions. Those identified and described as challenges include (amongst others); changes to the management and funding of healthcare provision (Hunter, pp.1-22), the possible manipulation of society's perception of the medical profession by television programmes (Bury & Gabe, pp.65-83), self-responsibility for health (Kelleher, pp.104-117), and alternative medicine (Saks, pp.84-103). Saks acknowledges that alternative medicine is increasingly sought by all members of society, but asserts that the "traditional monopolistic power base" (ibid., p.100) of orthodox medicine will prevail to control what alternatives are available. He suggests it is this dominance that ameliorates any challenge to orthodox medicine by alternative medicine. Saks is rather

brief in his consideration of the philosophies and knowledge-bases of alternative medicine posing a challenge to orthodox medical knowledge, but challenges to medical knowledge are a perceived threat.

Gabe et al's notion of challenges to medicine does not include the medical profession's perception of who or what challenges medicine. Literature in medical journals seem to refer to a challenge to medicine stemming from medicine's inability to be completely successful in combating disease and managing illness. Those challenges identified by Gabe et al may be factors in explaining how medicine has failed aspects of social existence. Weiss and Fitzpatrick (1997) found that GPs considered their professional autonomy, as manifested in prescribing practice, was more challenged by the questioning of their medical expertise than by any managerial control. Their study provides some empirical evidence for the inextricable interconnectedness of expert knowledge and professional autonomy in orthodox medicine. Ernst et al (1995) identified 12 articles in medical journals that provided some evidence of physicians' perceptions of the usefulness and/or effectiveness of complementary medicine. Only 5 of these articles relate to the UK and referred to manipulative therapies, acupuncture, and homeopathy — none referred to herbal medicine. It was concluded from the evidence that complementary therapies may often be perceived as moderately useful by orthodox physicians and that this implies a certain degree of acceptance by doctors if patients choose to use other forms of medicine alongside orthodox medicine.

Professions and Professional Power

Attempting to define or classify a profession is somewhat difficult, for the definition of professions is rather imprecise (Millerson, 1964, p.15; Freidson, 1973, p.3; Cant & Sharma, 1995, p.7) and may be specific to each professional occupation. A profession may also be viewed as a conceptual phenomenon peculiar to Anglo-American sociology — for few sociologists beyond the cultural bounds of Anglo-American sociology confer any importance to such a constructed occupational classification (e.g. Carchedi, 1975; Poulantzas, 1975, Unschuld, 1979; Baszanger, pers.comm. 1999). Indeed, one American sociologist has questioned whether it is logical to distinguish professions as a special category of occupation (McKinlay, 1973).

Some sociologists considered professions to have characteristic 'traits' that signified a distinctive occupational category — for example, Millerson (1964), Moore (1970) and Freidson (1970). Freidson argued that "one must use analytical concepts that allow comparisons" (1970, p.xix) and Dunkerley (1975, p.55) noted "Those occupations that sociologists and others agree can be labelled professions do appear to hold a number of characteristics in common". Johnson (1972) rejected notions of categorical traits and argued with three main points. Firstly, traits seemed to be derived from some 'true' profession that acted as a model — which profession could be considered archetypal? Secondly, there appeared to be little or no theoretical substantiation for how traits are manifested in a profession. Thirdly, traits seemed to be described by professionals themselves or by sociologists endeavouring to be objective. Freidson reaffirmed that "an adequate definition must be such as to specify a set of referents, that is, attributes,

traits or defining characteristics, by which the phenomenon may be discriminated in the empirical world" (1986, p.31). Freidson suggested that problems of definition arose from treating 'profession' as if it were an ahistorical concept without genesis in industrialisation (ibid, p.32).

Witz (1990, p. 675) not only asserts "the generic concept of profession" to be gendered [iii] but also considers that that concept uses "the successful professional projects of class-privileged, male actors at a particular point in history to be the paradigmatic case of profession" (ibid). This historical point has been referred to by Freidson (1986, pp.32-35), Davies (1999), Jordanova (1999) and notably Larson (1977). Larson considers that whilst a particular point in history when the concept of 'profession' arose may not be readily discernible, professions may now be perceived to consist of three particular dimensions. A cognitive dimension of knowledge and techniques, a normative dimension of service and ethics, and an evaluative dimension of comparison to other occupations (p.x). These three factors of expertise, trust and autonomy, and prestige are useful in recognising what may be considered as a professional occupation. Thus, although the trait approach to studies of professions has been severely questioned by many sociologists, there does seem to be a necessity (if only as a heuristic device) to use Larson's three dimensions when studying professions.

The medical profession, although a heterogeneity with many sub-groupings each with their own particular interests, has a group identity as a 'community' of persons pursuing activities in the care of illness and maintenance of good health within the population. In acting 'for the good of all' the medical professions demonstrate Parsons'

(1954) idea that professions could be distinguished by their altruism. The morals and ethics often associated with ideas of a professional practice may stem from 19th Century perceptions of the 'professional man' as a different man — "on a different plane" (sic) to those involved in commerce or manufacture Davies (1999). Acknowledged as morally sound 'gentlemen' they were trusted to regulate themselves within an institutional setting that registered practitioners, and in so doing, put them "above the fray" (ibid) of commercial and industrial existence. This accords with Durkheim's (1900) view that professional ethics could be the fount of moral order. Such a view has been reflected by Carr-Saunders and Wilson (1933), Lewis and Maude (1952), and Lynn (1963) who suggested that professionals were international communicators maintaining a world order.

Professions may be considered as levels in a stratified society or may be viewed as discrete occupations differentiated from other occupational groupings. This may be better expressed as viewing professions in terms of social mobility or in terms of occupational control. Both views refer to the prestige of an occupation — a prestige that derives from the occupation as source of personal identity, income, and to a greater or lesser extent, social status. Identity, income and status are themselves factors within occupations and constantly recur in studies of medical occupations. Larkin (1983) suggests a form of imperialism within the medical professions that results in some professions (e.g. nurses and midwives) being perceived as supplementary to, or aiding, the 'higher' professions of physicians or surgeons. Such a Weberian division of labour has been given an almost Marxist interpretation in definitions of social stratification within medicine (Parry & Parry, 1976) and illustrated within observations of patriarchy

in the medical professions (Ehrenreich & English, 1972; Witz, 1992). Freidson notes the inherent power of professions in the division of labour when he describes a profession as "an occupation which has assumed a dominant position in a division of labour, so that it gains control over the determination of the substance of its own work" (1970, p. xvii). Not only does this infer a position of market control, it also infers control over defining professional knowledge, professional practice, and who or what may be included in the profession.

Johnson (1972), rather than referring to professions, considers 'professionalism' as occupational control. He suggests three forms of control — collegiate, patronage, and mediative — that seem to correlate to levels of autonomy. Collegiate may be exemplified by the medical profession. With the aid of state support, in the form of statutory regulations, the medical profession has a monopoly on its practice to the exclusion of others. The expertise of the professional is a requirement throughout the major part of a population and is delivered, more or less, directly to the population. A high level of autonomy is granted through its practice being self-regulated by its own institutional associations. Patronage refers to corporate clients purchasing the expertise of the professional who may not have a statutory monopoly on their practice. The profession's practice may be influenced by professional associations, but its autonomy may be compromised by hierarchies within corporate clients. Mediative control applies in bureaucratic organisations where the professional is employed to practice expertise in a manner guided by the employer's requirements. Autonomy in these 'semi-professions' is limited because professional practice is ultimately determined by the employer.

Johnson's work highlights the interactive nature of professionalism. Each level of control and autonomy is a product of interaction between practitioners and another corporate concern. The collegiate level involves practitioners and the government, patronage is an interaction between practitioners and, usually, a commercial enterprise, and the mediative level is through an interaction of practitioners and their employers. Few interactions are temporally fixed, but changes to interactions may be timed in periods of short contracts of one or two years (as in patronage), short-term manipulation of employee numbers (mediative), or several years at the collegiate level. In this way professional control may vary over time. However, the British medical profession seems to continue enjoying a collegiate level of professional control and autonomy because its interaction with government has been comparatively stable.

As Johnson (1972) noted the collegiate control of the medical profession is granted autonomy by the state, Freidson (1973) agrees, and in Sharma's terms the profession has been 'scrutinised' by the state for licensing by the state (Sharma, 1996). The interaction of state and medical profession can be viewed in terms of Foucault's "governmentality" (1979, p.19) which suggests that specialised knowledge and expertise became institutionalised as a profession and part of the state governing process. Foucault defines governmentality as an "ensemble formed by the institutions, procedures, analyses and reflections, the calculation and tactics that allow the exercise of this very specific albeit complex form of power" (ibid, p.20). This includes a "tendency which leads towards the pre-eminence over all others, of this type of power which may be termed government" (ibid). It also includes "the process, or rather the

result of the process through which administrative authority gradually comes to be 'governmentalised'" (ibid). Johnson (1993 and 1995) articulates this view and suggests that "the professions are a key resource of governing" (1995, p.23) and that "doctors use their claim to diagnostic inviolability as a weapon in the effort to influence government policy" (1993, p.150). Some writers have viewed this situation as an abuse of the power of medical professions. By medicalising normal stages of human physiology, and effectively controlling acceptable medical knowledge, the medical professions act on behalf of government in an area of social control rather than areas of healthcare (Illich, 1976; Freund & McGuire, 1991). The tripartite functioning of knowledge, power, and government is now complicated by alternative concepts of health being sought by more people and multiple governments in those of the state and the European Community.

The 'occupational control' described by Johnson is exemplified in orthodox medicine's professional power and autonomy dominating healthcare in Britain. Pietroni (1990) has reviewed evidence for orthodox medicine being under pressure to account for its shortcomings in satisfactory practice. According to Hafferty and Mckinlay (1993) there is a "reconceptualization of medicine's role in society" (ibid., p.4). Both follow other commentators such as Illich (1976) who have challenged the omnipotence of orthodox medicine. These challenges have been recognised by Elston (1991) who considers them within two theoretical processes of change — 'proletarianisation' and 'deprofessionalisation' — described by earlier writers (e.g. McKinlay & Stoeckle, 1988). 'Proletarianisation' can be viewed as a loss of control over work practices through administrative dictates — professional control being reduced to Johnson's

patronage level. In the case of medicine, managers (often not medically qualified) decide policies of surgery practice for administrative and financial reasons with the expectation that doctors should execute them. From an autonomous individual professional the doctor is converted into someone with a particular skill that can be utilised as a member of a team in the business of primary healthcare. 'Deprofessionalisation' refers to a challenge to, and decrease in, the regard for specialised expert knowledge that informs and guides medical practice. This may be a direct or implied questioning of accepted biomedical science and practice, or a wider dissemination of medical knowledge to non-professionals that leads to a loss of respect for expert knowledge (Haug, 1973).

Scientific Medicine

Reflecting the dominant view of science amongst philosophers, historians, and sociologists of science, Krige and Pestre (1997) suggest "that 'science' is not a 'thing' which can be grasped by one description or one experience; not an object belonging to only one realm of human activity" (p.xxi). Referring to the multiplicity of possible answers to 'What is science?', they suggest that "characteristics which we isolate as typical of science are heavily context-laden" (ibid.). However they do acknowledge the still popular view of science as "a rational practice guided by the search for Truth and a critical approach. It aims to build logical interconnected systems of propositions" (p.xxii). They also note the public display of science as "an ongoing success story, embracing always more of the world around us, revealing that which ordinary mortals

could not see; a non-debatable system of knowledge from which the profane are excluded" (ibid.). The authority of science derives from this public display of science as "the universal criterion of knowledge, the mode of knowledge par excellence" (ibid.). It is 'black boxed' as a "quasi-magical practice since it remains at once incomprehensible and effective" (ibid.). Science is also influential in society as the arbiter of true knowledge that guides political action; science is "the system to which social and political authorities can appeal. Scientists are thus transformed into experts, experts from whom the state demands definition of health or safety standards ... They are experts called in to give an opinion in court and whose judgements control the life or death of others" (p.xxiii).

Science, and the knowledge produced through science, has been subject to many studies that have sought to argue that science is a social construction and is not substantively able to reveal an objective 'true' reality. Collins (1985) provides examples of groups of scientists which have been involved in discourses that result in the construction of accepted knowledge. By studying the arguments and closure of discourse within scientist groups he relates his work to theories of consensual perception and resultant pedagogy. Collins' work illustrates the concept of 'confabulation' noted by Carrithers (1992) in which the narratives of a group contribute to establishing a collective narrative that enhances the identity and cohesiveness of a group — in Collins' terms, forming an ordered knowledge. Using an argument similar to Collins' Sperling (1991) provides a feminist critique of primatology and primatologists that argues for a social, and therefore androcentric, construction of knowledge relating to primates. Socio-political influences on science are noted by Schwarz (1996) who argues that "the

prevailing myth of neutrality in science obscures the influence of these external political forces not only from the general public but also from scientists and students of science" (p.158).

Several social researchers have studied scientists at work to reveal social and cultural influences on scientific practice and knowledge formation. Traweek (1996) and Asquith (1996) are both ethnographic studies of sociocultural differences between Japanese science (in physics and primatology respectively) and the dominant western construction of science. Japanese scientists have had their work ignored or discredited because their methodology and presentation have not accorded with a tradition of western science. Gusterson (1996) worked with and studied nuclear scientists engaged in military applications, he revealed political influences on scientific arguments for the necessity of testing weapons.

Latour & Woolgar (1979) is perhaps one of the most cited studies of scientists at work and aims to give "a monograph of ethnographic investigation of one specific group of scientists" (p.28). As perhaps the first consideration of scientists in this way their work has become a 'classic' study in the sociology of knowledge. Many others have followed the concept of ethnographic study of scientists using Latour and Woolgar's work as a primary model. For example, Cooper studied the work of computer scientists and acknowledged Latour and Woolgar's influence (Cooper, 1998). Although the work of Latour and Woolgar was original and it may have been a well-conceived research project, the methodology and presentation are open to criticism that makes some considerable difference to its claimed validity. By attempting to act as an anthropologist

researching 'the other' the observer demonstrated a limited understanding of the contemporary anthropological endeavour. Using anthropological methodology to study social groups and their cultural interactions in a modern western environment is to be lauded, but an extreme observational viewpoint, as in this case, will result in decontextualised observations. Latour & Woolgar have succeeded in making the subject of study "seem as strange as possible" (p.30), and in so doing have shown scientists and their workplace in an *extra*-ordinary light. Consequently their observations are flawed and cannot be said to be truly representative. Although they deny beginning with any "prior hypothesis" (p.29), one of their guiding questions was "How are the facts *constructed* in a laboratory, and how can a *sociologist* account for this construction?" (p.40 — italics added). One can only perceive this as an *a priori* position of the non-empirical nature of facts that can be sociologically explained — social constructionism. Their discussion of fieldwork data makes a superficially convincing argument for such a hypothesis and they conclude that "Scientific activity is not 'about nature', it is a fierce fight to *construct* reality" (p.243 sic). Just a little further on and this conclusion is confounded by their own account. The observer, acting as a technician, made a mistake in adding some chemical to one of a series of beakers which resulted in anomalies in expected results. If reality is constructed then the mistake should not have made any material difference, the results should have been accepted without question, and they should have been assimilated within a total construction. The results were not accepted because they did not accord with previous empirically shown aspects of 'nature'. There must be some amount of underlying reality to have the mistake make a noticeable difference to results. Several writers have expressed a

similar notion of an element of natural reality in science despite an undoubted social construction and manipulation of scientifically derived knowledge.

Labinger (1995) and Lynch (1995) argue that social constructionist arguments based on social researchers' observations are untenable because the research findings are interpretations of observations. Duster (1996) in considering the social construction of molecular biology and its vulnerability to political application, warns against a polemic for social constructionism and suggests "it is the interplay of science and external forces ... that will best account for the outcomes" (p.129). Similarly, Haraway (1991) suggests that the social construction of knowledge should be considered alongside "a no-nonsense commitment to faithful accounts of a 'real' world" (p.187). An argument for empiricism of evidence in scientific enquiry is forwarded by Nelson (1991); specifically referring to male bias in developmental psychology she relates this to the wider area of scientific enquiry and feminist critique. One writer was quite forceful in declaring that "proof by assertion, plausible argument and consensual validation are no substitute for evidence ... Ideas are cheap. Evidence from rigorous scientific tests is hard to produce" (Bernstein, 1987, p.111). Apart from Bernstein's clear positivism, the other writers could be termed 'realist constructivists' (Cole, 1992) for they seem to suggest that scientific knowledge is socially constructed but that the construction is influenced to some extent by a 'real' world.

Cole (1992) describes a view of scientific knowledge as neither an extreme relativist construction nor a positivist phenomenology. He argues that the effects of external influences on scientific research should be distinguished between what should be the

subject of research and the outcomes of research as new knowledge. Cole further argues for a distinction between a core knowledge of 'facts' and 'research frontier' knowledge which is newly produced, with the difference arising from levels of consensus within disciplinary communities at a local level and wider communities of scientists. Consensus is not formed in one laboratory, as constructionist accounts such as Latour and Woolgar would suggest, but within a wider community of scientists who receive new ideas via published papers and assess them in relation to existing knowledge. Cole suggests that the "reception of new scientific work is influenced by three sets of interacting variables: the content of the work itself, the social characteristics of the authors, and the operation of social processes such as intellectual authority" (p.16).

The substantive content of the work is the important part of Cole's argument. His strongest reasoning seems to be that sometimes the work is almost instantly and universally accepted as core knowledge because it is so cognitively important and useful. He uses the three examples of works by Crick & Watson, Bardeen et al, and Guillemin & Schally as evidence of local knowledge at the research frontier becoming core knowledge for a community of scientists. None of these examples could have been so readily accepted unless they were so demonstrably true in relation to empirical evidence and existing core knowledge.

Cole's realist constructivism is well-argued and seems to resolve the disparity between constructionists and positivists. Cole acknowledges the social, economic, and political influences on shaping research frontier knowledge and its acceptance by local consensus. However he argues that core knowledge, consensually accepted by a

community of scientists as 'facts', has a demonstrable, empirical reality. Here he seems to be in agreement with the positivist thinking of Medawar (1984) who cites the works of Roentgen, Gorer and Snell, and Lindstrom. Medawar uses these three as examples of scientific discoveries that were accidental rather than intentional — if there was no substantive reality to these examples then they could not have been discovered. Cole's work is within a sociology of science that is perhaps dominated by a constructionist view of science, but beyond academic discourse the generally perceived view of science is as a positivistic ultimate understanding of the world.

A conception that seems to prevail in the majority of the British population is that science is a logical procedure of investigation into natural reality and the truth of natural facts. Layton et al (1993) assert that educational institutions reproduce "portrayals of scientific knowledge [that] frequently imply a conclusiveness and social disconnection which misrepresents the true nature of contemporary science" (p. 133). Jones (1994) refers to scientists as expert witnesses accepted by legal authorities and notes that "whether science is actually capable of delivering truth and certainty is less important than the fact that it is generally believed to be able to do so" (p. 272). Similarly, though in a more general context, Clarke (1996) notes "the general acceptance that science is entitled to pronounce on the nature of reality" (p.21). The public understanding of science is referred to by Ziman (1995) who states that "the general public does not, in fact, have a coherent conception of science" (p.244). Ziman further asserts that developments in academic studies of the philosophy and sociology of science "have not yet found their way into popular understanding. They are not even very familiar to those people directly involved in science policy, such as politicians,

higher civil servants, scientific notables, industrial managers and science journalists" (p.245). This assertion is important when considering a need for herbal medicine to receive scientific accreditation as a legitimated healthcare strategy within a sociopolitical environment. For in this respect medicine, as a science, is positivistic and may reject other knowledge that does not accord with 'facts' defined in terms of positivist science, and medical science influences policies of healthcare. Weatherall (1995) expresses such a commonly-held perception when he argues that medical science provides a more reliable view of what causes ill-health and the most effective strategies in prevention, rectification and/or cure of ill-health.

Medical science refers to the various sciences concerned with disease, illness and physiological conditions of human beings (Pathology, Anatomy, Immunology, Virology, Oncology, Pharmacology, etc.), and also refers to the knowledge-base underlying socio-politically acceptable strategies in the management of health for the British population. Notions of medical science are strongly influential in defining acceptable healthcare and has led to a dismissal of various healthcare strategies as unacceptable — including herbalism and homeopathy.

It is now common to refer to orthodox medicine, or biomedicine, as a science, but it has been argued that medicine did not become a science until the nineteenth century. Cunningham and Williams (1992) refer to the advances in laboratory equipment and techniques that allowed more intense study of natural organisms and the biochemical mechanisms of pathology. Bynum (1994) notes that the developments in science and scientific technique were associated with medicine through people like Pasteur and

Lister. As a result the public perception was that medicine was a profession with similar men making medical advances for the good of humanity. One writer suggests that medicine was constructed as a scientific discipline in Britain to define what counted as medicine in terms of the 1858 Medical Act (Weatherall, 1996). Weatherall relates the discourse within the medical profession subsequent to the Act that involved arguments over how medicine was deemed scientific. His focus is on the claims of homeopathy to be scientifically acceptable within medicine which would have made homeopathic practitioners eligible for registration as medical practitioners.

The histories of medicine's classification as science show that this was comparatively recent and not universally accepted. Jordanova (1995) states that medicine "has been unthinkingly treated as another form of science" (p.362) which may be a valid observation, but the social reality is one of a generally perceived idea of medicine as a science. Current medical training in Britain scientises medical knowledge and pathologises disease (Sinclair, 1997) and the increasing emphasis on scientifically derived Evidence-Based Medicine in recent years seems to uphold an impression of medicine as a science. However, science, and a popular notion of science's sole position as 'truth-knower', can be contestable (Engelhardt & Caplan, 1987) or scientists can get it wrong sometimes — either through "ideological indoctrination" (Rostand, 1960, p.48) or lack of effective and objective supervision in research team (this, again, stemming from "preconceived ideas and auto-suggestion" ibid, p.29).

One of the earliest writers to suggest the contestability of scientific truth through a consideration of ideology or preconceived ideas was Fleck (1935). His work was more

than just a case study of syphilis in the history of medicine. Fleck refers to, what has been translated as, a "thought style" (a way of thinking — almost an ideology) and a "thought collective" in explaining how consensus amongst scientists could change. Fleck's ideas were noted by Kuhn (1962) as very useful in considering the ways in which science and the paradigmatic thinking of scientists could be viewed. Academic scientists, as the knowledge-holders and knowledge-makers of our society, usually form a consensus of what is deemed scientific knowledge and reject other knowledge as non-science, pseudo-science, or deviant science (knowledge that deviates from the orthodox perception of science). Societies change and, as Fleck and Kuhn especially have shown, the knowledge held in society changes with time — usually at a varying rate dependent on the society's application of its resources and the vitality of academic discourse.

Some knowledge or science may become outmoded or irrelevant, may become superseded by other knowledge, or may become more relevant and useful. What was once deemed non-science or pseudo-science may even become acceptable to a society's perception of approved science. Dolby suggests three ways in which such deviant science may become accepted by academic experts and therefore acceptable as orthodoxy (Dolby, 1979, p.41).

1. Ideas expressed in deviant science may be independently arrived at by orthodox science through orthodox scientific methods and philosophy.
2. Ideas expressed in deviant science may be taken by orthodox science, found to have some value and then developed and kept within orthodox science's own terms. This is what has happened to a great proportion of herbal remedies. Prior to chemical medicines and synthetic medicines herbs were the only source of medicine. From ancient lore and generational transmission of herbal knowledge, medical science has

used herbs as medicine to combat disease and illness rather than as an agent to facilitate the natural healing process.

3. Ideas expressed in deviant science may become very popular among a large proportion of a population. Through social pressures this may influence the academic acceptance of deviant science. Dolby cites the examples of Marxism and Freudian Psychoanalysis; both were considered deviant views or knowledges yet both gained tremendous public acceptance and support as respectable knowledges rather than objects of derision.

Dolby suggests three further ways in which deviant science may actively change towards a position of acceptability (ibid., p.39). Here change is effected from within a deviant science by those adhering to the knowledge system that is rejected by orthodoxy.

1. Ideas expressed in deviant science may be altered or elaborated, whilst still retaining central tenets, to account for unacceptable anomalies. Dolby's example is of many psychics declaring that receptiveness at seances is not in the psychic's control and therefore not all seances are scientifically measurable or able to be evaluated.
2. Ideas expressed in deviant science may become improved upon and extended within the methodology and philosophy of the deviant science. In this way, "the basic insights of the system" (ibid., p.40) may lead to completely new knowledge or understanding.
3. Ideas expressed in deviant science may become re-presented or re-formulated to meet the perceived criteria for public and/or academic acceptance. Features that are recognised as belonging to orthodox science are adopted and displayed by the deviant science.

The re-presentation and re-formulation of herbal medicine as phytotherapy seems to accord with this third model of change described by Dolby. Whilst not referring to concepts of 'positional good' or the 'cultural capital' ascribed to knowledge-makers and knowledge-holders, the rationale for Dolby's model does reflect such notions.

Conclusion

The quite extensive literature reporting the growing popularity of complementary and alternative medicine illustrates that the practice of medicine is not a monolithic or fixed component of modern society — the number of guides to CAM for medical professionals demonstrates the interest in CAM by orthodox medicine. Proposals to integrate CAM with current orthodox healthcare may be investigated further given the views of some people that a single system of biomedicine limits opportunities for healing. Featherstone and Forsyth articulate a holistic regard for human existence within an interconnected world, encompassing — or at least touching on — issues such as naturopathy, environmental conservation, ecological awareness, and species interdependence. Coates and Jobst's report illustrate a more academic consideration of pluralism in healthcare, seemingly concerned with extending the discourse to a wider academic, administrative, and executive audience. As a an oversimplified summary of both works (and perhaps a gross malformation), one could be viewed as a 'New Age' revitalisation of ancient practices, and the other as a respectful comment that scientific medicine may not be omniscient.

As one of the many alternative systems of medicine, European herbalism is under-researched except by those already associated with herbal medicine. Griggs' book is invaluable as a single reference source for the history of developments in herbal knowledge and practice. Exogenous influences to the practice of herbalism and additions to the array of herbs that may be used in herbal medicine are comprehensively recorded. However, any change or developments in the epistemology of herbal

medicine are disregarded. For example, within recent decades any references to astrological influences on herbal medicines seem to have diminished in textual representations of herbalism to be almost non-existent in current literature. Similarly, Robbins' description of contemporary herbalism has been very useful as a datum point for comparison to questionnaire responses where herbalists describe their practice. The lack of independently derived data on herbal medicine is quite noticeable and may reflect a continuing perception that herbal medicine is not susceptible to systematic, scientifically determined research. Such research when applied to herbal medicine seems to be either inconclusive or negative. Newall et al's book demonstrates the unacceptability of herbal medicine within a science of pharmacology that is ostensibly dedicated to providing safe and scientifically proven medicines. Although it should be noted that some GPs prescribe herbal medicines derived from plants such as *Gingko biloba* and *Hypericum perforatum* and that such herbal medicines may be subjects of discussion in terms of pharmacological activity and proven effectiveness.

Orthodox medical professions are still generally considered to be scientifically based and their knowledge declared a science (Cole, 1992). This is despite a continuing discourse on epistemological issues in scientific knowledge which question the nature of science. Within this discourse arguments and viewpoints may conflict yet bear validity in a particular concept. Social constructionism may be contestable as an overarching explanation of knowledge formation, but some concepts are useful in this research. Collins' consensual order is manifest in Latour and Woolgar's product of a science laboratory — the 'inscription'. Some inscriptions of herbalism seem to have been rewritten to become more acceptable to an orthodoxy of medicine that has a

dominant paradigm of mechanistic science. The form and nature of inscriptions are part of what may be considered as recognisable elements of science. In this respect, to emulate scientific inscriptions may lead to the acceptance of deviant science as described by Dolby.

The 'unscientific' nature of herbal medicine may account for its practice being excluded from legitimately recognised professions. Whilst there may be an initial concept of medical professions guarding their sociocultural status, their professional power of control and closure is derived from, and intimately associated with, state government. Johnson analyses the power of closure and control that professionals hold and supports Foucault's notion that professional expertise and state government are inextricably linked. Inglis and Saks indicate the continuing closure of orthodoxy in medical knowledge, and Tovey's later work provides an interesting idea in the concept of 'contingent legitimacy' of assumed professions. It has been suggested that establishing a profession requires its practitioners to "legitimate its existence vis-à-vis other disciplines and society at large" (Robbins, 1993, p.116). Cant (1996) argues that strategies of professionalisation in some alternative medicines are employed to gain legitimation by a wider society. These often include reformulating knowledge bases of alternative medicines to present a greater conformity to orthodox science. Cant further argues that Lyotard's 'collapse of the metanarrative' and 'fragmentation' of knowledge (Lyotard, 1980) is not tenable in these instances; "legitimacy still hinges on a pretence, at least, to the scientific paradigm" (Cant, 1996, p.62). Sharma (1996) offers a similar argument in the case of homeopathic knowledge where homeopaths sought legitimation by linking their knowledge with science.

If, as Cant suggests, the 'death of science' is not applicable in medicine, then latter-day deconstructions of science and knowledge may not have so much substantive evidence as once imagined. If deconstructionists such as Lyotard are right, then medicine may be the last bastion of scientific authority. This research should determine the extent of re-formulation and re-presentation of herbal medicine within a society that continues to endow biomedicine with ultimate authority in matters of healthcare. It will illustrate processes within the sociology of knowledge relating to herbal medicine and contribute to a wider understanding of knowledge presentation.

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[i] The Egyptian Ebers Papyrus, variously dated to about the same time or up to five hundred years later, was a text of remedies that included prayers, incantations, and amulets (Dawson, 1929; Porter, 1997).

[ii] Literally hundreds of herbals are available — not just the ubiquitous reprints of *Culpeper's Herbal.* They range from 'coffee-table' books such as Peterson's *Herbs and Health* (1993), through more detailed and informative ones like Rogers' *Women's Guide to Herbal Medicine* (1995), to botanical descriptions of herbs such as Pahlow's *Healing Plants* (1993). Popular periodicals, particularly those often displayed in newsagents' shops in a 'Home and Lifestyle' section, now regularly have articles referring to alternative and complementary therapies.

[iii] There are now many valuable insights into professions from a gendered perspective — including Oakley (1986), Salvage (1988), Witz (1992), Walby et al (1994), and Davies (1995).

Chapter 3 — Methods

The researcher as an individual cannot be completely detached from the methods of research, for as Hughes states "the researcher is an active agent in the construction of the world " (Hughes, 1983, p.123), and Mason refers to "idiosyncratic factors in the biography of the researcher" (Mason, 1996, p.20) that may contribute to a preferred methodology. It may become apparent that this researcher's biography has led to a questioning attitude towards the 'taken-for-granted' nature of 'orthodox' knowledge. Whilst decrying an anarchic 'free-for-all' in any aspect of human existence, I have a long-abiding interest in 'different ways of knowing'— by that I mean different from the prevailing ontologies and epistemologies found in western societies and globalised by a history of western imperialism and colonialism. Without sliding down the slippery slope of extreme relativism, I doubt an ultimate truth derived from one correct methodology; whether it be Nirvana achieved through the 'True Path' of Mahayanist Buddhism or the existence of tachyons through particle acceleration. Each is an explanation that we find satisfactory enough to believe in, according to our standpoint, until another explanation takes its place. For many centuries the alleviation of illness could be explained as the result of using herbs: the knowledge and practice of herbalism was an accepted truth and methodology until biomedical science took its place.

However a questioning attitude does not authorise research methods that concentrate solely on contributing to the sum of cognitive knowledge. For example, much cognitive knowledge in the field of human psychology was gained by Milgram (1963) and

Zimbardo (1972) but their methods have given rise to much discussion, comment and critique regarding the ethics of research. Whilst sociological research seldom, if ever, produces extreme discomfort or distress in the social members being studied, there is still a need for the researcher to consider the effects of research on all parties involved in the research. For this researcher a preferred methodology has to acknowledge the existence of participants in this research and accord respect for their dignity as human individuals. On a continuum of classification for ethics and politics controlling social research, the methodology should be guided by humanist principles rather than utilitarian desires for knowledge acquisition. In broad terms this means openness and honesty by the researcher in order that all participants in the research understand what the research aims and intends to do. Allied to this is an integrity of the researcher that guarantees whatever is in the researcher's control of confidentiality and protection for participants.

As influential as the researcher's biography and assumed role, the proposed methodology has been formulated in accordance with a tradition that the object of study influences the methodology; "the appropriate methodology for any given study can only be chosen with reference to situational factors, factors specific to the study in question" (Bloor, M., 1978, p.545). In this instance "the study in question" is the extent of re-presentation of medical herbalism as a strategy of legitimation for herbal medicine. British society endows orthodox medicine with influential power in legitimating healthcare strategies, therefore the interests of medical professionals may have contributed to the need for such a strategy. This is based on assumptions (derived from readings in medical literature and the sociology of professions) that herbal

knowledge is perceived by orthodox medicine as unscientific and that a distinguishing factor of medical professions is an expert knowledge of biomedical science. The aim of the study is to seek indications that herbal practitioners have enacted strategies to reform their knowledge in a more scientific framework. These may be within a general process of 'professionalisation' of herbal medicine or may be premeditated actions to seek legitimation within a modern science of medicine.

The factors specific to the study include a paramount factor of the study not being readily amenable to generating quantitative data that could be analysed in a meaningful way — apart from data describing herbal practice. A number of indices and measures could be used from such descriptive data: the number of registered herbalists; the number of practice hours per week; the number of herbalists practicing alongside other healthcare professionals; the number of orthodox practitioners accepting herbal medicine as a valid measure in managing illness; etc., etc.. Data of this nature has been gathered by the use of a postal questionnaire sent to a random sample of registered herbalists. The questionnaire also sought to elicit herbalists' views and attitudes on phytotherapy as a distinction from traditional herbal knowledge. In this way the questionnaire also acted as a filtering device in revealing those herbalists who expressed, clearly and strongly, positive or negative attitudes to phytotherapy.

The Questionnaire

The questionnaire was sent to herbalists registered with the National Institute of Medical Herbalists (NIMH) and the International Council and Register of Consultant Herbalists (ICRCH). The 1999 registers of both institutions were used and showed 297 members registered with NIMH and 61 members registered with ICRCH. The first member and each alternate member thereafter on the registers were selected to receive the questionnaire — 148 NIMH members and 30 ICRCH members. The accompanying letter that explained the purpose of the research suggested that the questionnaire could be completed in approximately 10 minutes and asked for return of the questionnaire within 14 days. Follow-up telephone calls were made to non-respondents 21 days after sending the questionnaires and repeated, if no definitive reply to enquiry was received, 7 days later. This resulted in a final response rate of 48.88% (N 87).

The first three questions asked for details of their training and when they commenced practicing. It was thought that not only would this reveal the percentage of herbalists who were qualified through contemporary university science degree courses, it could also reveal the percentage of herbalists who had qualified many years earlier at the School of Herbal Medicine when traditional herbal knowledge had been the prime component of the curriculum. The fourth question sought to ascertain the medical journals that were regularly read by herbalists. It was thought that this would signify the number of herbalists regularly receiving reports of herbal medicine in a more scientific format — e.g. *Journal of Phytotherapy, European Phytotelegram,* or *Phytomedicine*, as opposed to *Herbalgram* or *British Journal of Herbal Medicine*.

Questions five and six referred to the hours and days per week that the herbalist practiced. Many herbalists could be termed 'part-time' and do not have the demands on their services to warrant a 'full-time' practice. This may be a reflection on current occupational economics for, it could be argued, it mirrors a general employment market of part-time workers with fewer industries or services willing or able to support full-time workers. Linked to this is the number of patients currently on their records which was asked for in question seven. Question eight was designed to confirm the average time in minutes for a consultation. The growing popularity of herbal medicine may be partly accounted for by the perception of a concerned and interested consultation that takes considerably longer than an average GP consultation. More and more orthodox doctors are referring patients to CAM practitioners and question nine asked for a percentage figure of such patients. As some herbalists practise alongside other healthcare professionals, question ten sought to clarify this with possible responses that indicated whether the herbalist practiced alone in their own premises, within some form of health clinic, or with other CAM practitioners.

Questions eleven and twelve asked for their previous occupation and whether herbal medicine was their sole current occupation. It would seem that herbalists cannot be classified as predominantly ex-teachers, ex-nurses, or ex-anything, but a pattern of perhaps ex-caring professionals would be revealed. This would also relate to those herbalists with another occupation.

The remaining questions asked for attitudinal responses relating to phytotherapy and professional status. Questions thirteen, fourteen and fifteen sought attitudes to the distinction between phytotherapy and herbal medicine. These three questions were designed to reveal clear expressions of firm attitudes that would allow a selection of respondents suitable for later interview. Questions sixteen and seventeen asked for views on phytotherapy's effect on herbal medicine and whether it was popularly perceived amongst herbalists. If phytotherapy has been divisive among herbalists it was thought that these questions could indicate any division.

Question eighteen referred to European legislation and asked if the herbalist thought that such legislation had had an effect on herbal practise. Many herbalists seem to perceive European legislation as a threat to herbal medicine so these responses were expected to signify what percentage of herbalists perceive such a threat. In a similar way some herbalists appear to seek recognition in a state registration system similar to osteopaths or homeopaths, whilst others appear content outside such a system. Question nineteen sought herbalists' views on this and linked with questions twenty and twenty-one that asked for herbalists' perception of their professional status and whether it had improved in the past 5 years.

Any measures by associations of herbalists to research herbal medicine and produce scientific data was ascertained by interviews with representatives of those associations and analysis of primary texts. Similarly any changes to the science content of the training programme for herbalists was shown by direct interviews with herbalists and

representatives of training institutions. All of this data is qualitative and relied on two main methodologies — textual analysis and interviews.

Textual analysis may be argued to be imprecise as it is thematic rather than quantitative. As one social scientist has stated "there are missing elements in thematic analysis" (Pawson, 1995, p.120). He lists valid criticisms of the method that include selectivity in samples, the peculiar manner of reading by the researcher, and an underlying assumption by the researcher that they can read a text in a more considered way than the intended audience. It is inevitable that the texts are selectively sampled for the number of available texts that are relevant to professionalism, herbalism, or scientific knowledge is of such magnitude that consideration of all of them would entail several years of a researcher's time. The researcher must therefore select a sample; even if a random sample of every n^{th} text was used, the researcher has to originally select the relevant texts that the sample is taken from. Crass selectivity to promote a particular ideology would become apparent with intelligent reading of a thematic analysis compiled in such a way. The researcher *has* to read the texts in a peculiar manner — skimming for text indicative of themes that the researcher has recognised from initial readings and may have had corroborated by colleagues or people directly associated with the subject of study. An assumption by the researcher that the text is read in a more considered way can only be referred to as a personal assumption that is individual to each researcher — not all researchers assume this when analysing texts for themes. Many researchers are quite aware that the intended audience of a text may often be more cognisant of recurrent themes than the researcher. However, in a deeper analysis

of primary texts the researcher does read in a peculiar manner and one which the intended audience may not recognise.

The use of interviews in research may also be problematic for there is a possibility of generating anecdotage and extremely subjective interpretations rather than useful research data. Careful attention to the construction of interviews may alleviate this, whilst analysing existing empirical data and relevant records in tandem with interviewing should corroborate general themes and concepts. The interview is an established form of gathering information from respondents directly involved with or concerned with the object of enquiry. In this way information is received 'first-hand', from 'those in the know', and will often reveal nuances and contexts that were not originally apparent; direct information such as this comes from the informant without intermediary manipulation. The respondent conveys their own knowledge and feelings that may be used by agencies of social action, or, as in this instance, provides useful information that extends understanding. Interviews with herbalists provided a contemporary view of British herbal practices and subjective views of any claims to science in herbal medical knowledge. Interviews with institutional representatives provided information that relates to the science content of herbal training and was thought to reflect consensual perceptions of changes in herbal knowledge rather than subjective views.

Textual Analysis

Texts to be analytically considered may be arbitrarily classified as primary or secondary with an arguably deeper analysis being applied to primary texts. Secondary texts are previous studies that are relevant to the concepts of professionalism, herbalism, and scientific knowledge. These form a background to primary data and an initial framework with which to analyse the data. A temporal element is apparent in that it is *previous* work to be considered and, as in most aspects of human existence, what went before affects what is now. Primary texts are taken to be comments, letters, and original reports authored by orthodox medical professionals or herbal practitioners. Whilst many of these texts may be published in particular journals, some will be unavailable outside libraries in specific institutions. In this respect, archival and library resources in institutions are essential in gathering historical and contemporary information. Access to such resources was granted by the National Institute of Medical Herbalists and The School of Phytotherapy.

The primary texts analysed not only include publications similar to *Lancet,* and *British Medical Journal* — those usually available in medical libraries — but also those specifically concerned with alternative medicine, herbal medicine and phytotherapy.

British Journal of Herbal Medicine

Complementary Medical Research

Complementary Therapies in Medicine

European Journal of Herbal Medicine

European Phytotelegram

Herbalgram

Journal of Alternative and Complementary Medicine

Journal of Phytotherapy

Phytomedicine

The textual analysis that was proposed may not in fact be recognisable as a distinct methodology. It is not within the realms of literary theory, ethnomethodology, linguistics, semiotics, cognitive psychology, or discourse analysis — although some elements of these understandings may be recognised. Textual analysis is an analysis of a written discourse and such a discourse may be argued to be composed of rhetorical statements. The rhetorical analysis of texts has been characterised with five features by Atkinson (1998). First is the eclectic nature of rhetorical analysis that "borrows concepts and techniques from a broad range of fields" (p.142). Some understanding of linguistics, history, philosophy, perhaps psychology and sociology, together with some understanding of the cognitive content of the text is necessary. Second — and allied to the first feature — is an awareness of the context in which the text appears. The third feature is the interpretive nature of analysis which is arguably only successful when the context of the text is understood. As a fourth feature Atkinson notes the inductive nature of rhetorical analysis whereby the results of analysis 'emerge' from the analysis itself. The fifth feature is the operational level of rhetorical analysis which is that of genre. Here Atkinson defines genre as a framework in which experience is interpreted into socioculturally agreed references.

In this research textual analysis may be more accurately described as a questioning reading of texts. Similar in many ways to more formal exegesis, a 'close reading' of a text considers several factors beyond the delivery of communication through text, the texts are analysed in the way the text is organised and not only for their content. Although the texts may have been originally intended for a particular audience and to be read for its content, analysis in this manner may indicate doubts, or affirmations, of the content. In this analysis of texts the following points will be considered —

- Setting:- the place where the text appears can provide authority, prior authentication, and substantiation. One author has had several texts published in the *European Journal of Herbal Medicine* that are analytical reviews of pharmacological properties of herbs. In this setting, the text has a limited audience and may be disregarded by academics and medical scientists for the publication is published by the National Institute of Medical Herbalists which, it can be assumed, has an interest in promoting herbal medicines. It does not seem unreasonable to suppose that if the content and presentation of information within these texts could be transposed to *The Pharmaceutical Journal* without any change, it would, no doubt, be more readily accepted by academics and medical scientists for that journal is published by the Royal Pharmaceutical Society.
- Headings:- these can provide a category of attributes and actions which the reader can use to make sense of what follows and can direct perceptions of the significance of the text. Similarly, textual openings can suggest categories of relevance for a reader's interpretation of the text — e.g. historical, revelatory, solving or answering, proving. A report by Coates and Jobst (1998), *Integrated Healthcare*, was recently published following considerations of orthodox and complementary medicine in

Britain. Within their Introduction they use headings within the text to direct the reader and limit categories of relevance. This section begins with references to the history of their project which immediately directs the reader to the relevance of the text. Such a 'historical pathing device' is a way of fixing or establishing pastness, and of claiming the relevance of making an interpretation in terms of this pastness. The Introduction closes with 3 headings; "What is wrong with the present situation", "How matters might be improved", and "The way forward". The authors direct the reader to an idea that something is wrong — without mentioning anything that may be right, they then solve the stated problem, and finally describe a positive future that will affect the reader if the authors' message is accepted.

- Externalising devices:- for example a passive voice, provides 'objectivity' for the reading that the phenomenon described has an existence by virtue of actions beyond the realm of human agency. Tovey's 1997 paper, 'Contingent Legitimacy' published in *Social Science and Medicine*, reports an interpretation of data in a passive, objective manner yet relates to the author's interpretation of the data rather than an independent phenomenon. For example in his 'Discussion' he refers to "three themes were identified earlier as pivotal", but neglects to affirm that the author identified the themes and identified them as pivotal. Without a 'close reading' of this text the informational content could be perceived as almost free of any human agency.

- Sequencing devices:- the ordering of events in the narrative can act as a 'cutting out' process, whereby other potential paths and other potentially relevant events and actions are backgrounded. Such devices also provide for the connectedness of described events and activities. These may be most easily discerned in historical or

developmental accounts, but can also be found in contemporary accounts. Using Tovey's paper again as an example, he narrates events leading up to his research in 1994 and thereby conducts the reader towards consideration of his work in light of an increased debate about complementary medicine following the publication of a 1993 BMA report on complementary medicine. He disregards any other contemporaneous events or actions that may have influenced his respondents who were chiropractors, homeopaths, herbalists, and reflexologists. At that time chiropractors were awaiting state recognition as registered practitioners (Act passed 21 June 1994), herbalists were dividing into two main institutional bodies, the two training associations for homeopaths were separately seeking state recognition, and reflexologists continued to be content as subaltern therapists.

Interviews

Approaches were made to several prospective institutional representatives from the National Institute of Medical Herbalists, the British Herbal Medicine Association, the School of Phytotherapy, the College of Practitioners of Phytotherapy, the International Council and Register of Consultant Herbalists, Middlesex University and University of Central Lancashire. The herbalists primarily selected on the basis of their questionnaire responses were secondarily selected for practical reasons of time and accessibilty. There were 36 interviews and these were located throughout England, Scotland, and Wales. All interviews were semi-structured, informal, and notes taken at the time; if agreeable to the informant, the interview was recorded on audio tape and later

transcribed. The venue and time of interview was one that was amenable to the respondent — the respondent assisting the researcher and therefore, in all equity, should have some power in the relationship by deciding where and when the interview should take place.

As a primary information source the interview provides data that can be analysed for any commonalties that suggest the presence of recurrent themes, collective perceptions, or shared effects of social processes. Analysis of this information by 'pattern recognition' is problematic, and in a wonderful understatement by one writer, "demanding" (Fielding, 1993, p.167), but careful attention to the actual interview procedure will provide information that is valid and more easily analysed.

Strategies to validate research may involve evaluating the final presentation of material or scrupulous attention to the practice of research and the language used in research. One writer has suggested 3 factors in validating the product of research; generalising the findings to a larger population, testing particular hypotheses, and integrating simple counting procedures to produce quantitatively empirical data (Silverman, 1993, pp.156-166). Silverman argues that if the research product meets these criteria then it must be validated. Similarly, Mason considers the "validity of interpretation in any form of qualitative research is contingent upon the 'end product'" — *but adds* — "including a demonstration of how that interpretation was reached." (Mason, 1996, p. 150). Here the author is advocating a stated description of the researcher's interpretation of research material — not just the interpretation of data into theoretical frameworks, but also the interpretation of verbal and/or textual language that constitutes data.

Interviews are a "remarkably efficient way to obtain information" (Jones, 1996, p.170), but the limits of language make the use of interview data problematic. Agreed interpretations have to be either implicit or made explicit. Usually, as long as the generic language is the same (i.e. English, French, etc.) agreed interpretations are implicit; however, when discussing concepts then interpretations often have to be explicitly agreed. Data from interviews can be less prone to problems of interpretation by using specific research practices prior to and during the course of the interview that clarify theoretical concepts and the meanings of words. Following the work of Kvale (1996) and Pawson (1996), the practice outlined here will produce data that is relevant and valid. It involves planning the interview to relate to theoretical concepts that shape the research, planning how the interview can contribute to the research, and then conducting the interview in a dialogic style that clarifies what is said.

The notion that research interviews are merely conversations the researcher engages in to gather information is too simplistic, for conversations use language as a medium of communication and language itself is problematic. The meanings of language may be focused on various fields of study including feminist politics (Buker, 1996), socio-cultural studies (Boler, 1997), psychology (Green, 1997), or medical practice (Nessa, 1996; Pilmick, 1998; vanManen, 1997).[i] It would seem we can never be sure of the exact meaning another person wishes to convey — we would have to be able to engage with and completely understand all the preceding events and formative contributions to the other's use of language. This is impossible, so a consensual agreement of definitions and meanings to language has to be relied upon.

Cicourel's work on sociological method not only devotes a chapter to "Language and Meaning" (Cicourel, 1964, pp. 172-188), it also includes a consideration of Berelson's assertion that it is wrong to assume a "common universe of discourse" (Berelson, 1952, cited in Cicourel, 1964, p. 149). Cicourel accepts this and argues in a similar way to Firth (1964) that language must be understood as context specific. Cicourel argues further that researchers have their own reasoning for research, including the purpose of research and the testing of theory, which locates them in their own context. Without the respondent being aware of the researcher's context the data may be uncoordinated in context and therefore invalid.

There would seem to be two research methodologies that directly address the problem of a 'common universe of discourse' and locate data in its context. One involves the researcher immersing her/himself into the environment of the respondent in order to gain insights and understanding of the cultural environment giving rise to the respondent's mode of language — the ethnographic method. The other is a dialogic style of overt interview whereby meanings and semantic interpretations are mutually agreed between the respondent and the researcher. If theoretical concepts are also made explicit during the interview then the researcher validates their theoretical interpretations by allowing respondents to accord with, or even confound, theory. In this way any problems of language are overcome by constructing a common universe of discourse.

Several writers have advocated dialogic styles when research interviewing, some for ethical reasons of equal power and informed consent (Oakley, 1981; Reinharz, 1983;

Gustavsen, 1986; Mishler, 1986; Homan, 1991), others for reasons of maximum information-gathering (Giddens, 1987; Jones, 1996). Kvale suggests a dialogic interview should produce maximum relevant information if it is planned correctly, it will be equitable, and should facilitate analysis (Kvale, 1996). The interview should be planned with an idea of what the researcher wants to investigate, how the interview helps the researcher extend, substantiate, or refine what the researcher already knows, and how the interview data is to be re-presented (ibid., pp.179-185).

Planning an interview in this way makes the data obtained by interview of prime concern rather than the respondent's utterances. However this does not ignore respondents or classify them as incidental to research, respondents should be acknowledged for their contribution and the interviewer should demonstrate "active listening" (ibid., p.132). This means paying attention to the respondent's words and making it explicit that the respondent is being attended to. Head nods and contracted comments like "I see" can demonstrate the researchers interest. Integral with this is an important part of constructing a common universe of discourse; by questioning certain relevant words that may need clarification in contextual meaning and/or asking for

repetition, a confirmed understanding is achieved. [ii] This allows the respondent to perceive that their words are being listened to, which should facilitate an ensuing sense of their own importance to the interview, and gives them the opportunity to review their own words immediately. Such a strategy has the multiple effects of the respondent clarifying meanings for themselves, clarifying meanings for the researcher, and indicates to the respondent whether they and the researcher are 'talking the same language'. Kvale notes that an interview is a social interaction of two people who talk about specific concepts and/or events and that this social interaction results in "co-authored" data (ibid., p.183). The interviewer plans and directs the interview whilst the respondent *responds* to the interviewer to form a dialogue that constitutes data. A dialogue that was planned with a consideration of how the data was to be re-presented — that is, how it was to be analysed and formed into an account relevant to the researcher's original purpose. By clarifying meanings and concepts during the interview, as it was planned, then analysis may become redundant as a separate exercise as it is accomplished within the interview itself (ibid., p.178).

Kvale uses a similar reasoning and argument as Pawson who advocates an "information flow" (Pawson, 1996, p.313) between researcher and respondent to forestall any misunderstanding of theoretical frameworks guiding the research. In Pawson's "theory-driven model" of the interview "the researcher's theory is the subject matter of the

interview" (ibid., p.299).[iii] Pawson notes that the researcher and respondent have much knowledge of the research issue between them, but that this is in differing "knowledge domains" (ibid., p.303). The purpose of the interview should be to construct points of convergence where a common universe of discourse can take place — or as Pawson suggests, get the researcher and the respondent "working in the same direction" (ibid.). Pawson comments that some sociological research using interviews can often fail to acknowledge that the researcher has a purpose known to them and that the researcher has a theoretical and conceptual understanding — if unacknowledged in the interview, then the respondent "can remain blithely unaware of all this" (ibid., p.305).

Pawson resolves this by advocating that the interview should be an interchange of information whereby the researcher explains the underlying concepts and theory that form a basis for the information asked for (ibid.). This entails the researcher being aware of the need to confirm that explanatory introductions to questions are accepted and understood by the respondent. Here Kvale's ideas of 'clarifying' and 'repeating' questions can be used. The respondent is thus informed of a theoretical and conceptual framework which enables them to consider their responses in light of the researcher's information. For example the researcher may be investigating educational standards with a theoretical framework of differential access to education by reason of income level; the respondent can express their views in those terms rather than in terms of, for instance, whether educational standards are governed by innate intellectual ability. The researcher can extend this to discover the respondent's reasoning. Continuing the example, the researcher may have received a reply that included the phrase *"education standards are falling"*. The researcher can investigate this statement and the reasoning

for it by offering a reason that the respondent can comment on; *"You say education standards are falling, is this because you have read the latest OFSTED report?"*. Not only does this clarify the earlier statement, the respondent can then agree or disagree "in relation to the attitudinal patterns as constructed in such questions" (Pawson, 1996, p.306) — thus ensuring a common universe of discourse.

In making theory explicit during the course of interviews the respondent is accorded equity in the interaction. Explicating theories and concepts makes them "open for inspection in a way that allows the respondent to make an informed and critical account of them" (ibid., p.313). It also allows reflexivity in the researcher and respondent. The researcher, in investigating a subject of study, has immediate 'feedback' on their conception of the subject of study and may be able to discern how their conception affects the subject of study. The respondent, as 'spokesperson' closely associated with the subject of study, is also able to reflect on the subject of study as conceived by the researcher. The respondent may consider how the researcher's conception may differ from their own, how it may add to their own conception, and perhaps how their association with the subject of study has been affected by the interview.

Theoretical assumptions and hypotheses are factors that guide the research in contexts defined by the researcher. Relevant data and informative comment from respondents regarding theories and hypotheses can only be gained through dialogue. Kvale and Pawson may have different viewpoints regarding research interviews but in application to practice have very similar strategies. If the strategies are combined within the same

interview then the interview should produce data that is relevant, useful, and valid — because it originated in, and was framed in, a common universe of discourse.

Concepts and terminologies that arise in the course of interviews may need clarification to ensure agreed understanding. It may be clarification of meanings that could alter the focus and direction of research, for it is only by entering into a dialogue that some concepts can be clarified. As an example, a herbal practitioner may refer to their "patients". Does this mean a person on a list that the practitioner is responsible for, as in orthodox medical practice? Or is this a person who, at one or more times, has sought herbal medicine from the practitioner? In other words, are patients a more or less fixed body of people attached to a practice or are they a number of people who have used the herbal practitioner's services. Clarification may reveal further areas for research, perhaps into the relationship between practitioner and patient and how that may differ between doctors and herbalists.

There may be further inconsistencies that need resolution. If a herbalist refers to "the science of phytochemistry" do they mean that herbalism has a scientific basis? This would appear to be inconsistent with a view that herbs affect the body's "natural energy forces" or that herbal medicines are a synergistic use of the whole plant part rather than a specific constituent recognised by reductionist biochemical analysis. This could be pertinent to a theoretical assumption that herbal medicine would be more acceptable to orthodox medicine if it was shown to be scientific. A theory-driven interview would clarify and refine such a theory whilst extending the researchers knowledge on which the theoretical assumptions were made.

The rationale for research interviews is that they gather data and/or comment from persons intimately involved in the subject matter of the research. To this end interviewees have to be selected from those people who might initially be distinguished from the general population. In this case the initial distinction is registration with the National Institute of Medical Herbalists (NIMH) or the International Council and Register of Consultant Herbalists (ICRCH) as published in the respective body's Register of Members. Both registers include only those herbalists who have been accepted as qualified and competent to practice herbal medicine. For these particular interviews a further distinction was drawn by the researcher: registered herbalists who responded to the questionnaire with clearly stated attitudinal comments.

It is, unfortunately, possible for a research interview to result in much anecdotage and little relevant or valid data. For researching biographical history it may be productive to spur the interviewee with a limited number of specific questions and allow the interviewee to talk at length. This might lead to an unstructured oration that fulfils the aim of gathering biographical history whilst also supplying much valuable contextual comment — alongside much irrelevant data. A planned interview — i.e. an interview with a schedule of aims and specific questions to ask of the interviewee in order to reach those aims — can focus a research interview to limit extraneous and irrelevant data. In contemporary sociological research — especially if the research involves attitudes and perceptions — it is imperative to plan a research interview.

The planned interview when executed becomes more direct, more succinct, hopefully clearer in its results, and may be described as driven. The interview is driven — i.e. guided and maintained in motion — by the researcher who therefore limits as well as focuses the topics under discussion. Whilst this might preclude other topics or concepts that someone else may consider to be relevant to the focus of research, by guiding the interview the researcher maintains the focus of their research. (This should not be used to excuse selective gathering of data or comment, to 'cherry-pick' whatever seems to suit the research.) In planning and driving the interview the researcher's aim might be towards;

- gaining data for application to a specific theory
- attitudinal comment from the interviewee relating to a specific theory or concept as used by the researcher
- data and/or comment that may have a direct and demonstrable relationship to the general field of research or to the specific focus of research

The researcher's aim for the interview may be any or all of these aims. For this research the aim was to gather herbalists' views on medical herbal practice in contemporary Britain with particular references to how herbal medicine is understood by herbalists and how much the sociopolitical environment influences their practice.

The research did not aim to reveal the 'truth' about medical herbalism or to assert one 'true' view of herbalists and their practice. Responses were sought to gain data that might be applied to the specific theory that herbal medicine has been re-presented as phytotherapy in order to seek acceptance by governments and orthodox biomedicine. More importantly, responses were sought from herbalists to refine and clarify this

theory — and if necessary discard the theory — for the overarching aim was to gather herbalists views. Even though the validity of herbalists' responses as a 'consensus fact' might be questionable it still serves to highlight herbalists' own views. The validity or 'truth' of those views is not as important as recognising them as herbalists' views and therefore valid in their own right. For the study is concerned with herbalists' views and does not presume to establish any 'truth' or 'fact' of the cognitive content of herbalists' views. They are as stated and therefore are the objects of study. Using these stated views as data for analytic consideration only requires validation by confirmation that these views were stated by these herbalists in these contexts at these times and in these localities. It is not to seek a 'transcendent truth': it is to reveal an emerging pattern that contributes to a plausible explanation of how those views relate to one another.

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[i] Earlier writers have forwarded arguments that language is inextricable from the individual. Chomsky (1972) claimed a relationship between language and the mind; Lacan (1977) and Kristeva (1989) are more psychoanalytical and reject the notion of a stable, coherent, self, they argue that the self is formed in a complex network of language and social customs. Beyond the self, Firth (1964) suggests what is said must be understood in the entire context of the utterance, including such non-linguistic factors as the status and personal history of the speakers and the social character of the situation — in Garfinkel's terms, it is the 'indexicality' of context which gives meaning to language (Garfinkel, 1984). Others have suggested that language is a form of signs that derive their meaning in relation to other signs (Saussure, 1974), or that language derives its meanings from its application and use (Wittgenstein, 1968).

[ii] It is a useful strategy for the researcher to develop as it will allow the researcher to "sense the immediate meaning of an answer and the horizon of possible meanings that it opens up" (ibid., p.132). However it should be noted that the researcher has the responsibility of deciding how far that horizon should reach to extend the researcher's knowledge rather than a wide vista of confusing possibilities.

[iii] If Kvale's methodology could be interpreted as making data the prime concern of the interview, then the two authors could be said to be divergent on this point. Nevertheless the two are compatible for, as Pawson states, there is an "inevitable and intimate interrelationship between theory and method" (ibid.), whilst Kvale acknowledges "the theoretical conceptions of what is investigated should provide the basis for making decisions of how" (Kvale, 1996, p.180).

Chapter 4 — Phytotherapy as a 'scientific' medicine.

British medical herbalism has been subject to sociocultural and sociopolitical influences that have produced many changes within the practice of medical herbalism in the past thirty years[1] — notably some re-presentations of herbal medicine as a type of medicine that may be accommodated within medical science. An apparent marker of this re-presentation is the increasing use of the term 'phytotherapy' and, accompanying that, is a re-formulation of ancient traditional herbal knowledge into pharmacological knowledge of plant biochemistry. It could be argued that I use the term 'phytotherapy' to signify a distinction between a pharmaceutical understanding of herbal medicines and an empirical, clinical understanding of herbal medicines, and that this distinction is of my own construction. However, contemporary usage of the term by some herbalists and herbal institutions does indicate this distinction and I will show that this is apparent when considering the language and form of presentation of modern herbal medicine. Most forms of modern medicine are understood in a context of science that seems to be acknowledged as a superior way of understanding health, illness, and medicine. Compared to empirical and historical ways of understanding health, illness, and medicine, scientific medicine has been generally considered in Western societies to be objective and progressively effective. Traditional forms of medicine and healing are often denounced in medical literature as dangerous myth or folk-lore unless they can be understood in terms of scientific medicine. Consequently any form of medicine and healing, to be accepted as a legitimate practics in a Western society, has to be presented in those scientific terms if it is to be acceptable to governmental and institutional authorities.

In this chapter I offer a brief description of phytotherapy's genesis as a form of medicine and a truncated history of factors that led to medicine becoming 'scientific'. For anything to be 'scientific' it must relate to 'science' so the next section discusses 'science' and considers science as a process and as a product. The representation of science is then examined as structured and patterned inscriptions that form a 'face' of science. This is then related to texts referring to phytotherapy and questionnaire and interview responses from herbalists. Acknowledging the possibilities of ambiguity and interpretation in herbalists' responses it is concluded that phytotherapy has become an accepted term amongst many herbalists without any conscious connotations of science. It is argued that phytotherapy is represented in texts and in training curricula within a scientific framework, but the actual practise of medical herbalism remains little affected by any association with biomedical science.

Phytotherapy and 'Scientific' Medicine

The term 'phytotherapy' has become well known amongst British herbal practitioners and the arrival of this term from France has been referred to in many herbalist journals but its origin has been most succinctly described by Griggs (1997). At the beginning of the 20th century Maurice Messegue became very popular in France as a herbal healer and in newspaper reports of his trial for the illegal practice of medicine his work was referred to as 'La Phytotherapie'. Several years later another Frenchman, Dr. Jean Valnet, became a successful and acclaimed physician whilst promoting the traditional

knowledge and use of herbal medicines and essential oils. In 1972 he published a book — *Phytotherapie: Traitement des Malades par les plantes* — in which he consciously avoided terms that could only be understood by medical professionals.[2] Three young doctors — Lapraz, Duraffourd and Belaiche — studied and worked under Valnet but wanted a more academic approach. As Lapraz expressed it, their wish was to "give phytotherapy credibility in terms of modern medicine". In 1976 they organised a conference on natural medicines that attracted 10 doctors and 15 pharmacists. One year later a second conference had over 200 people attending and was presided over by the Professor of Materia Medica at the School of Pharmacy in Paris. Belaiche went on to form the Institut Nationale de Phytotherapie in 1978 which provided training in this form of medicine. Perhaps because of its apparently scientific approach to herbal medicines phytotherapy grew in popularity amongst doctors as well as patients. A new Natural Medicine course was provided by the University of Paris at Bobigny and Belaiche was appointed Chief of the Phytotherapy Department.

However phytotherapy medicines were composed of refined extracts of plants and essential oils and these medicines were formulated for each individual patient. They became too expensive compared to traditional herbal medicines or standard synthetic pharmaceuticals so the French Ministry of Health ceased reimbursement of individually formulated prescriptions and restricted the medicines that doctors could prescribe — few plant-based medicines appeared on the list of sanctioned medicines.

The term phytotherapy has been used in other European countries including Germany which has the biggest phytomedicines industry in Europe — in 1995 it was 10% of the

total pharmaceutical market and was worth over 2 billion dollars. More than 80% of German doctors regularly prescribe phytomedicines. These phytomedicines are based on plant extracts and assessed in terms of medical pharmacology, pharmacy, and toxicology. They are assessed as plant extracts rather than as a series of chemical compounds and active ingredients (in this they are very similar to traditional herbal medicines) and are accepted by the state regulatory bodies and the medical profession on empirical evidence and scientifically-based trials. Also they may be combined with orthodox drugs and are often used in a similar way to synthetic drugs for symptomatic relief as an allopath rather than as agents in restoring the body's natural healing processes. As one researcher who studied German primary healthcare for three years remarked: "alternative therapies have been applied in an orthodox context . . . and forced to fit into parameters imposed by orthodox science which remains dominant" (Whitelegg, 1994, p.238).

Phytotherapy has developed from traditional herbalism with slight but very important differences. Herbalism is founded on the use of plants (sometimes whole plants but more usually specific plant parts) selected by reference to historical records of clinical applications to treat ill-health. The practice of medical herbalism considers the patient as an individual with an imbalance in the natural stasis of well-being. The patient may display particular symptoms of an illness but herbalists believe the underlying cause of the illness may not necessarily be a single apparent source attributed by orthodox medical science but a combination of factors in the experienced life of the patient. Herbalists seek to treat the underlying cause as well as the symptoms by using herbal

medicines to restore the balance of the body and thereby enable the body's own healing forces to act effectively (Mills & Finando, 1988, p.32).

Phytotherapists still use herbal ingredients but often account for the action of such medicines in scientific terms. Some practitioners may still hold similar beliefs in the body's own healing forces but use herbs as biochemical agents. At its least extreme the distinction is between empirical and traditional evidence of herbs and biochemical analysis of herbs. As an example, herbalists may consider garlic to be useful in certain respiratory disorders and heart disorders — the historical evidence seems to uphold this view. Phytotherapists, on the other hand, consider garlic to contain allicin which is a chemical that has been proven to be efficacious in clinical trials. Perhaps another way of expressing it would be to say that the herbalist has *learned* that garlic is good for particular conditions, whilst the phytotherapist has had it *scientifically shown* that allicin — which occurs in garlic — is good for particular conditions. A more extreme difference between herbalism and phytotherapy is that phytomedicines may be applied in an orthodox allopathic way to combat disease or illness recognised by orthodox medical science. They may be applied as a replacement for, or sometimes in conjunction with, synthetic pharmaceuticals but they are considered to act in the same way as any other pharmaceutical. Some doctors or patients may prefer them for their demonstration of fewer side-effects or the very fact that they are derived from natural materials. There are few apparent textual references to phytomedicines acting in a way that herbalists seem to accept — that natural medicines act to restore the body's own healing balance. This may be similar to homeopaths distancing their representations of homeopathic knowledge from homeopathic traditions that professed a 'dynamic

energy' contained in homeopathic medicines (Cant & Sharma, 1996a, p.582). In both instances notions of balancing 'healing forces' or other form of nebulous energy do not accord with orthodox medical science so acceptability to medical science is precluded if any reference is made to such notions. Orthodox medical science appears to be strongly influenced by reference to concepts of science that have become established and accepted as 'science' by society, the sociopolitical authorities and institutions that form and execute social policies. However medicine was not always associated with science — physicians were practitioners of the 'art of physic' rather than scientists.

Medicine as Science

Weatherall (1996) notes the complexity of medicine's progress towards being termed scientific — referring to the many studies of 19th century medicine including Bynum (1994) and Cunningham & Williams (1992) — and suggests that 'scientific medicine' could be interpreted in several ways for there "was little consensus about the meaning" (p.175). Weatherall's thesis is that scientific medicine attained a more fixed meaning by the exclusion of some groups and some ideas from institutional discourse within medical schools, medical societies, and medical publications. He illustrates this with particular reference to homeopathy and how homeopathic ideas were not considered to be sufficiently scientific in terms defined by medical institutions. Weatherall suggests that the debates and discourse defining medicine as scientific arose from the medical profession's dissatisfaction with the 1858 Medical Act. This Act sought to establish a governing body (the General Medical Council) which would maintain a register of qualified practitioners and thereby legitimate those practitioners. At the time of the Act several forms of medicine, other than that taught in medical schools, were popular;

these included homeopathy, spiritualism, and forms of botanic medicine such as herbalism, naturopathy, and physio-medicalism.

Although the GMC did not recognise these alternative forms of medical practise as sufficiently qualified medical practises, the GMC did not use any influence to prevent alternative practitioners from continuing to practise. Doctors resented these 'quack' practitioners of alternative medicine and sought to guide the institutional discourse of defining and directing medicine (p.178). Weatherall suggests that this resulted in a "hierarchy of information" that was controlled through the "Royal Colleges, the leading medical societies, and the metropolitan medical journals" (p.179). Alternative practitioners were excluded from this process which left the task of defining medicine as scientific an internal matter for doctors only. This control and closure of medical information was applied to the furtherance of medical knowledge. Scientific medical knowledge required a rational appraisal of empirical observations derived from a logical methodology. Such a logical methodology could be found in laboratory science which made use of technological developments and was based on Baconian ideas that science was the best way to reveal nature. Bynum refers to the increasing "technology of medical practice" (1994, p.219) and notes that science and technology had become almost inseparable: new scientific knowledge led technological design to develop new instruments, diagnostic aids, and electrical appliances. However laboratory science could only be successfully pursued in well-funded establishments such as universities and medical schools which could exclude alternative ways of understanding medicine if the establishments deemed them irrational or illogical. Such a pedagogical attitude is illustrated by Gooday (1991) who refers to microscopy in Victorian laboratories.

Students were instructed in what they should see through a microscope and told to supply descriptions of their observations that accorded with preconceived perceptions; any description of *actual* observations that did not agree with what they were told they should see was considered deviant and indicative of a student's failure to use a microscope properly. Katouzian (1982) has argued that this academic science resulted in the scholasticism of much science and that the process was assisted and reinforced by the dominant paradigm which defined scientific research. Dolby (1982) refers to the autonomy and independence of academic science consolidating the expertise of academic science by excluding the laity and alternative 'experts' from influencing scientific research. Although the above consideration of how medical institutions defined science as applied to medicine refers to the events and discourse in the latter part of the 19th. Century, contemporary definitions of science are still diverse.

'Science'

As has been noted many writers have demonstrated the multiplicity of meanings and definitions of 'science'. Science may be related to many and various modes of thought, methodologies, and fields of knowledge — therefore it could be argued that any definition is necessarily relative and partial. Many recent attempts to define science are well-argued by the writers and seem to describe a phenomenon of sociocultural existence rather than any specific methodology or knowledge (see for example Nader (ed.), 1996 and di Leonardo (ed.), 1991). Medawar (1984) is more specific when he describes science as an activity and the knowledge derived from that activity. He asserts

that science "parades principles, laws and other general statements from which statements about ordinary particulars follow as theorems" (p. 3). He credits science with a "connectedness ... [that] gives science great stability and power to assimilate more information" (p. 4) and states that such a connectedness gives science the ability to use its laws to predict likely outcomes. Medawar suggests that science has come to mean a methodology of rigorous observation and meticulous measurement. This would seem to accord with an idea of 'hard' — i.e. 'cold' and 'objective' — science that reveals Nature. The scientific method may often involve manipulation of naturally occurring states of matter or manipulation of properties of that matter as an enquiry of matter and that this is based on a paradigm of accepted, conventional science that has a connectedness of belief in the previously empirically revealed knowledge about matter that is objective. Such a view is echoed by Jones (1994) who relates this view of science as the view accepted in the British legal system though highlighting that "the view of science that has been co-opted by Law is a caricature of science" (p.5). In Jones' terms "scientific knowledge is the only objective truth" and that "in making their observations, scientists employ a set of procedures and techniques which are neutral and hence provide an exact reading of the facts of reality" (ibid). As mentioned earlier, Ziman and others assert that this view of science is the dominant view in the majority of the population, many institutions, and those people actively engaged in making public policies. Science then would appear to be a specific process of investigation practiced by scientists who thereby produce specific knowledge of an objective reality. Scientists are skilled in a methodology that is logical and rational which results in knowledge that is also logically derived and rationally incorporated into existing knowledge.

Such a view of science describes science as both process and product — an objective and rigid process that produces knowledge of reality. The process involves actions that follow a linear logic rigorously adhered to that is based on a rationale of cause and effect. Actions and observations are calibrated to form a form of universal quantification that maintains a rigorous methodology and the appearance of detached objectivity . Allied to quantification is the perceived need to refine measurements in actions and analysis of objects of research to the point of a single identifiable element. The process produces an ordered knowledge — ordered within a common conceptual framework — that is inscribed in written reports and may be applied to the development of techniques and technologies. The inscriptions and applications form the product of science which is perceived by society and often accepted without question or reference to the concept that the process and product of science occurs within a sociocultural milieu. Despite the continuing notion of science as the revealer of truth within the general population, many researchers have gone beyond the 'face' of science to question the processes and products of science. Most sociologists, anthropologists, and historians of science acknowledge the social and cultural influences in the creation and application of scientific knowledge. Studies of scientists at work have identified group cultures affected by their own social interrelationships and a location within a wider social milieu of institutions, government, and society (e.g. Latour & Woolgar, 1979; Knorr-Cetina, 1981; Gilbert & Mulkay, 1984). The idea of social influences on science has not been readily accepted by many scientists. Indeed one anthropologist in 1935 commented on scientists denigration of sociocultural research and seemed to predict such findings when writing; "the reaction of these scientists is itself of

considerable ethnological interest and contains at least as much 'folklore' as the attitudes found among the Tungus" (Shirokogoroff, 1935, p.118). It is from these and similar studies that the objectivity of science as process and product is questioned.

Science as Process

It has been argued that scientific rationality is a "*post hoc* rationalization for ordered practices and conventional ways of proceeding. Forms of logic, rationality and reason are then formal statements which reflect our acceptance of institutionalised practices and procedures" (Woolgar, 1988, p.48). The socio-cultural environment of western societies in which a dominant paradigm of scientific knowledge exists, underwrites the dominance and acceptability of such a paradigm and thereby empowers itself (Bourdieu & Passeron, 1990). To question the basis of logical reasoning and scientific enquiry is to be deviant from society's norms and labelled 'eccentric', 'ignorant', or 'mad'; any traditional belief that does not accord with accepted rationality is discounted, invalidated, or even held to be significant of mental aberration. Traditional knowledge and belief is too easy for it accounts for existence without the controlling effort of enquiry and reasoned thought: "Nature simply presents us with chaotic feelings and desires, and it is assumed that only the external intervention of reason can bring 'order' and 'discipline' into this chaos" (Seidler, 1994, p.63). This could be described as another dichotomy between nature and culture — humanity's 'natural' emotions and understanding being accommodated in religion, myth and lore, and the culture of scientific reason being based in rationality. Implicit in such an idea is the superiority of rationality, "as long as reason is secure in its conviction that it alone can deliver impartial and objective knowledge, then it can always condescend and patronise" (ibid., p.188). Bauman (1992) refers to "a superior knowledge guaranteed by the proper method of its production" (p. 11). Such charges of condescension may stem from a commonly-held perception of science as an understanding closed to, and remote from, the majority of the population — the concept of science as 'black boxed' by scientists

to retain an aura of mystery only explainable by scientists themselves. Jones (1994) suggests that "law and science ... are complex and forbidding bodies of knowledge which intimidate the uninitiated. Together, they represent the official version of reality" (p.1). Science, as with other disciplines of enquiry, does remain a mystery unless and until a person studies it, for much science is knowledge of a specific and particular phenomenon — many people may know that a photon is something to do with physics but beyond that it is a mystery. Particularising the object of enquiry involves analysis to reduce the object to the single particular and ascribing both a quantifiable measurement to particularise the methodology and a quantifiable measurement to particularise the object.

Wilks (1961, pp.5-12) asserts that quantification seems to be a prominent feature of any undertaking that assumes to be, or is perceived as, scientific. Quantification could be viewed as a measurement process composed of three elements; reproducibility, validity, accuracy. The process of measurement must be repeatable and should, in similar conditions, reproduce the same measurements within a degree of inexactitude that is tolerable. The measurement must measure what is intended to be measured to be valid; an argument, or observation, independent of the measurement determines what is intended to be measured. The process must utilise scales of measurement that are accurate enough to clearly distinguish the object of measurement from any other. With recognised quantities expressed in numeric terms it is possible to manipulate these quantities through calculation and develop formulae that become more or less fixed — therefore replicable — and formulae that lead to predictable results. Pietroni (1991, p.43) asserts that "science, as perceived by medicine, involved objective measurement"

and Shyrock (1961) argued that orthodox medicine has not only relied on the measured accuracy of medicines in the practise of healing, but also increasingly refers to quantifiable concepts in modern healthcare "to gradually reduce to measurement problems previously considered unmeasurable" (p. 104). Notwithstanding the arguments against the very concept of objective and precise measurement (for example, Cicourel 1964 and Feyerabend 1975) science appears to require accurate quantification to render it replicable and predictable. Without precision or accuracy we either have an ad hoc practice of reaction to stimuli and circumstances or we have anarchic and idiosyncratic attempts at understanding that produce meaningless results.

Despite philosophical, social, and anthropological arguments, this would seem to be the dominant view of science as a process held by society and its institutions. This has influenced attempts by some herbalists and herbal institutions to gain acceptance for herbal medicines by following the scientific process and presenting pharmacological reports on herbal medicine as the product of science.

Science as Product

The products of science are often embodied in technologies and machinery that few people readily associate with science or scientists engaged in laboratories — scientific theorising and scientific methods of investigation into the nature of light and electromagnetic radiation eventually produced the television. This tangible form of product is usually the final development from science, but perhaps the initial product of science is order; from the systematic classifications following Carl Linné's *Systema*

Naturae of 1735 to the tidy ordered knowledge so well described by Collins (1985). Collins refers to consensus amongst groups of scientists that results in knowledge acceptable to the group and thereafter declared by the group as 'scientific' knowledge that can be shown to accord with the order of existing knowledge. This is, by Collins' description, a localised knowledge that becomes presented to a wider community. Ophir & Shapin (1991) reviewed the situated nature of knowledge and asserted that "the place of knowledge lays down conditions for the appearance of the objects of science, for their validation as real, and for the terms on which they are knowable" (p.15). The idea of knowledge as localised has been the basis for much criticism of institutionalised Western knowledge overpowering indigenous knowledge and precluding other ways of knowing. Pratt (1992) suggests that Western classificatory systems bring Nature to an ordered understanding that removes Nature from its context of setting and environment and objectifies Nature in isolation. This means the possibility of ignoring — and in time losing — knowledge of Nature that may be as pertinent and relevant as the domineering Western knowledge. The imposition of order to knowledge is not peculiar to science but it remains one of science's main products.

The main, and perhaps the most noticeable, product of science is its inscription as text (Latour & Woolgar, 1979) which originates as some form of reporting of the science process and often appears in a specialist journal or as a presentation at a specialist conference. Through referencing by other scientists or direct transformation into a published book it becomes part of the self-sustaining accepted literature relevant to the specialised science and becomes incorporated into the general corpus of knowledge accepted as 'scientific'. As mentioned earlier several researchers have observed the

creation of such a product of science and all noted the local contexts and social influences on the production of 'science'. Scientific knowledge as product becomes dispersed amongst a wider society and may be transformed and/or translated in a manner more easily assimilable to non-scientists. The 'popular' and public perception of scientific knowledge may thus be ambiguous to the original formulation and may account for Ziman's assertion that science is poorly understood by the majority of the population (1995). This would appear to be especially so in relation to medical science. Until the very recent expansion of higher education and open access to information about medical science through the Internet, many people considered that 'doctor knew best'. Doctors were considered highly educated specialists who understood illness and held knowledge as medical scientists which was in a form incomprehensible to the general population.

As has been previously stated medicine as a 'science' is a relatively recent concept but is now generally considered to be within a popular view of science as an ultimate understanding of a verifiable reality. Medicine complies with generally accepted principles of scientific rationality, logical methodology, quantification, and observation which does not allow the primacy of clinical and historical knowledge. The prevailing orthodox view of medicines, which is strongly influential in approving medicines for legislative acceptance, is dependent on the sciences of pharmacology and biochemistry. It seems reasonable to assume that if herbal medicines are re-presented as scientifically sound medicine — as phytomedicines applied in phytotherapy — they might be more likely to gain legitimate acceptance. The clinical and historical knowledge of herbalists developed from folk-lore and traditional accounts has to be discarded for a more

scientific knowledge that can be accommodated within scientific medicine and its associated terminology. The logical rationality of science aims to be universal and in that respect its presentation often uses languages adopted to be universal in academic understanding — Latin and Ancient Greek. Admittedly the languages have an ordered form that is useful and, perhaps, more precise in application to systematic nomenclature, but it does serve to distance many people from understanding science and aids a perception of scientists as learned in esoterica. The term phytotherapy has the Greek root *phyto* that refers to a plant and many journals devoted to the sciences of biology and botany have titles that reflect this; e.g. *Phytochemistry, Phytomorphology, Phytopathology*. Thus the term phytotherapy carries connotations of science (phyto) and medicine (therapy), but this is not enough to represent phytotherapy as scientific medicine.

Representing Science

The original language and form of presentation of scientific knowledge is often unconsidered and taken to be unproblematic. Texts are often accepted as accurate accounts of the science process which led to the revelation of scientific knowledge or as 'truth' verified by authorities on scientific knowledge (usually fellow scientists). The language and form of presentation within a text are important in forming perceptions of that text and, perhaps, the producers of that text. From the mass of theoretical and empirical understanding of cognitive psychology (e.g. Eysenck & Keane, 1992) to the more philosophical understanding of linguistics and semiotics it would seem that texts

are seldom simply communications with one superficial level of meaning in their cognitive content. Winterowd (1968) states that "there is no such thing as neutral language" (p.1) and argues that language is moral, ambiguous and persuasive irrespective of cognitive content. However, communications must occur in a society and language, for all its failings, is the usual human form of communication with a structure and regular form that ostensibly conveys cognitive meaning.

By following an established pattern of language and form the cognitive content of the text may be set in pre-existing fields of cognition. In his analysis of a short story by Balzac, Barthes (1970) refers to narrative codes that exist within a text. One such code is the 'gnomic' or cultural code that evokes a certain body of knowledge. The language or the formation of the text, often implicit and maybe unconsciously, refer to a reader's awareness of specific knowledge. It is this 'gnomic' code of science and scientific knowledge that is revealed in texts relating to phytotherapy. Rather than asserting that an author purposefully meant this, it will be shown that consideration of the language used in these texts leads to a coherent interpretation that emerges from such an analysis. It is not just one of many interpretations — relative to any reader — but the establishment of a meaning limited to logical and reasonable conditions of possibility. Gross (1990) suggests that "science is a rhetorical enterprise, centred on persuasion" (p.6) and that science uses rhetoric in textual representations of scientific knowledge to persuade itself and others of the truth of that knowledge. He notes three "genres" of text; "forensic" that establish 'facts', "epideictic" that pronounce on the integrity of ideas, events or persons, and "deliberative" that recommend future actions (p.10). Gross asserts that a "science report is forensic because it reconstructs past science in a way

most likely to support its claims: it is deliberative because it intends to direct future research: it is epideictic because it is a celebration of appropriate methods" (p.11). The form of presentation in scientific texts have regularities that "re-enact the scientists' faith in the existence of a suite of methods by which the causal structure of the world can be displayed" (p.85) and the style of scientific texts persuades the reader that the cognitive content is objective. The 'passive voice' style of reporting is impersonal and distanced which suggests that the science is unaffected by the scientist's presence, further, the inclusion of tables and figures quantify and objectify without discussion of the rationale for using tables and figures or how whatever was researched can be quantified or objectified.

Representations of Phytotherapy

The rhetoric of scientific terminology identified by Gross is recognisable in representations of phytotherapy produced by individuals and institutions who could appear to have a motive to promote phytotherapy. The British Herbal Medical Association was formed in 1964 "to advance the science and practice of herbal medicine" and to "foster research into phytotherapy". This appears to be the difference between the historical understanding of herbal medicine and phytotherapy — the *science* of herbal medicine is re-presented as phytotherapy. Some would argue that the two terms are interchangeable but herbal medicine was seldom referred to as scientific until the emergence of phytotherapy[3]. The Association produced a British Herbal Pharmacopoeia that describes, pharmacologically, nearly 200 herbs and methods for

preparing botanical drugs. A companion book, The British Herbal Compendium, provides a "wealth of scientific information on the same range of plant drugs". Several publications refer solely to phytotherapy rather than herbal medicine. In language and form of presentation they are almost indistinguishable from established pharmaceutical publications.

The journal *Phytomedicine* was founded in 1994 "to set international scientific guidelines for standardisation of pharmacological studies, proof of clinical efficacy and safety of phytomedicines". It was intended to make phytomedicine "more rational and acceptable for therapy and ultimately, legislative acceptance". Legislative acceptance is important with regard to the European Union and its programme of harmonisation. The reductionist analysis found in the BHMA's Compendium and Newell et al's guide (1996) presents herbs as constituents and active ingredients which therefore denies the traditional view of herbal medicine and supports a perception of herbs as merely natural sources of biochemical agents. Support for this view may come from pharmaceutical companies wishing to extend their range of products. If that support is translated into financial support for research into phytomedicines then that may allow more medicines to be approved. The European Medicines Evaluation Agency, in deciding to approve a medicine, requires a series of analyses and clinical trials, that extends to a 22 page report, for any medicine not described in an approved pharmacopoeia — an extremely expensive undertaking for any concern without the financial resources for research that pharmaceutical companies may have.

A reductionist pharmacognosy prevails in papers relating to herbs in such journals as *Phytomedicine*, *Pharmacological Methods in Phytotherapy Research*, and *Phytotherapy Research* where the style and presentation of the cognitive content accords with Gross' description of a scientific report. In these journals an Introduction locates the studied herb in relation to its botanical identification and in relation to any earlier scientific study. The description of Methods is often written with an implicit understanding that the reader is fully cognisant of experimental methodology used in biochemistry. The Results are often in tabular form and always expressed in terms of quantity. Any closing comments or Discussion assert that the study occurred, the observations detailed in the paper were noted, and any speculations on the application of the resultant knowledge in using the herb are often tentative. Many journals have a similar style and content as *Phytotherapy Research* which states as one of its aims "to publish analytical information on pure natural products, plant extracts and their pharmaceutical formulations". No longer is the knowledge of herbal medicine framed in terms of empirical clinical evidence derived from historical use, herbal medicine is to be defined within the scientific paradigm of pharmacology. These journals are, by content and form of presentation, scientific journals without apparent interest in supporting or denouncing herbal medicine. Nevertheless they are often referred to by other writers seeking scientific references to the effectiveness of herbal medicines — which may sometimes be an attempt to quote 'objective' data in support of herbal medicine.

One journal that is 'objectively' scientific in support of herbal medicine, although it never uses the term, preferring its titular term *Phytomedicine*, publishes results of

research on phytotherapy and phytopharmacology and has instructions for the submission of manuscripts similar to those found in most biomedical journals. Its content and style is very much as Gross (1990) describes the "Rhetoric of Science". It accepts reports of clinical studies, pharmacological studies, assays, and screening studies if they fulfil certain criteria. Clinical studies "must be designed, implemented and analyzed in a manner to meet current standards for clinical trials". This seems reasonable but it does locate acceptable studies within a scientific medicine, and the stated necessity for chromatographic 'fingerprints' to document the chemical composition of the plant or plant extract locates the studies within the science of biochemistry. Similarly, pharmacological studies of plant extracts must present statistical data with the usual requirements of mean values, standard deviations, and statistical significance. The action of constituent plant chemicals is thereby quantified using an established scientific method. Assays are biochemical analyses and therefore reaffirm reductionist scientific investigation as the foremost route to understanding natural matter. This is also supported by screening studies which contribute to the methodology of biochemical assaying. The majority of papers published in this journal are clinical studies and pharmacological studies of *in vitro* and *in vivo* experimentation[4] that would appear to be of the same form and language as papers published in more widely-known medical science journals.

The *British Journal of Phytotherapy* was first published in 1990 and possibly indicates when the term phytotherapy became more prominent amongst herbalists in Britain. Consideration of the terminology used in this journal seems to provide confirmation of Gross' argument that such texts are persuasive. From the first issue of the *British*

Journal of Phytotherapy the term 'herbal medicine' has been replaced with the term 'phytotherapy'. Its initial Editorial made this explicit when stating one of its aims was "to meet the needs not only of today's highly trained practitioners of Phytotherapy (or herbal medicine) ..." (BJP, 1990, p.5). Immediately following the Editorial is an article entitled 'What is Herbal Medicine?' which reprints prefaces to the first edition and the sixth edition, and extracts from the first chapter, of a well-known book by Rudolf Weiss: *Herbal Medicine* was originally published in Germany in 1960 and translated into English for publication in 1988. Although the journal editors acknowledge that the book was originally written by a German for a German public, it "provides a good example of what phytotherapy stands for and should be" and the editors add "the text speaks for itself" (BJP, 1990, p.6). The text can be read as offering several messages but the overriding message is one of change. The preface to the first edition states that a "deliberate break has been made with the traditional approach still widely used today, which has its roots in history and folk medicine" (ibid.). Weiss considers it necessary "to show that herbal medicine can match other fields of medicine in the thoroughness of its scientific work" (ibid.). The preface to the sixth edition mentions two new chapters and states that much of what is new "has come from the discipline of plant chemistry ... it has provided new data on the constituents and pharmacological actions of a number of the best known and most widely used native drugs" (ibid., p.7). The message in these prefaces seems to be a movement from traditional herbal medicine towards a scientific medicine of plant material that is understood through the science of biochemistry. Herbs are no longer the objects of study, it is the drugs and active chemicals contained in the herb that are studied. It is in the extracts from Weiss' first chapter that this is made explicit and the term 'phytotherapy' associated with the science of

phytopharmacology. Weiss states that "phytotherapy is the science of using herbal remedies to treat the sick" (ibid., p.7) and asserts that it is "now a scientific subject, a field of medicine in the same way as chemotherapy, hydrotherapy, electrotherapy and others" (ibid.). He recognises the difficulty in distinguishing phytotherapy from a past herbalism when new herbals are being published "where the text contains little or nothing of the discoveries made in scientific phytotherapy" (ibid., p.9). The message in this first chapter extract seems to be a reaffirmation of scientific medicine in a unique form of 'phytotherapy' that stands alongside other forms of scientific medicine and now stands apart from herbalism.

In publishing these extracts without particular comment, it seems reasonable to assume that the BJP supported Weiss' ideas and terminology and wished to promote phytotherapy as a scientific medicine. Throughout the same issue the term 'phytotherapy' is used interchangeably with herbal medicine except in one article which was written by a long-established medical herbalist.[5] The journal is published by the School of Phytotherapy which is the main teaching institution in Britain for medical herbalists. Training as a herbalist became formalised and accredited by the National Institute of Medical Herbalists in the 1960s. The School of Herbal Medicine was formed where training involved much study of biochemistry and pharmacology, anatomy and pathology but retained a reliance on empirical and clinical evidence for the application of herbal medicines. Since the appointment of a new Principal in 1976, training now appears to be weighted in favour of a more rigorous and 'scientific' approach to the application of medicines. Just because an ancient herbal has led to a continued use of a herbal remedy without any noted contradictions, this does not

provide sufficient evidence for its continued use. The herbal remedy must be biochemically analysed to discover the active ingredient that can be clinically shown to be effective. This would seem to be science underwriting herbal medicine and therefore re-presenting herbal medicine as phytotherapy. It is interesting to note that the School became an institution independent from NIMH in 1982 and since 1991 has been governed by the College of Phytotherapy. Further distancing of the School from old ideas of herbalism was made when the School changed its title from the School of Herbal Medicine in 1993 and established its own practitioner association as The College of Practitioners of Phytotherapy. Phytotherapy as a form of scientific medicine would now appear to be acceptable, if only as an academic understanding rather than a fully integrated and legitimated healthcare strategy, as the School's 4 year course is now validated as a science degree course leading to a BSc in Phytotherapy.

The Practise of Phytotherapy

The promotion of scientific terminology and scientific methodology by the School of Phytotherapy would appear to be successful for many of the herbalists who responded to my questionnaire and/or interview did not recognise any immediate distinction between medical herbalism and phytotherapy. This is not surprising as nearly all respondents were trained by the School since the introduction of a more scientific curriculum in 1976 and therefore consider phytotherapy the modern name for what they practise. Also, in the cause of brevity the questionnaire design could not fully encompass every nuance and interpretation of the terminology that was used:

consequently the terms were simplified. The construction of a distinction between 'phytotherapy' (as a signifier of a pharmacological understanding of herbal medicine) and 'traditional' herbalism (as an empirical and clinical understanding of herbal medicine) would appear to have been less than explicit. The current Editor of the *British Journal of Phytotherapy* responded to my enquiries with a declaration that "herbal medicine and phytotherapy are interchangeable terms for the same thing" (Conway-Grim, pers. comm. 1999) and added that phytomedicine "works effectively on pharmacological principles" (ibid.). One GP in southern England who also practises herbal medicine echoed this with the terse comment "words merely words" whilst a herbalist in Scotland quoted Weiss' definition of phytotherapy as a science and commented "I agree with this, and think [the questionnaire] is playing with words". The number of respondents expressing similar views of phytotherapy as medical science were few (app. 9%). Several similar comments were made that suggested no distinction between herbalism and phytotherapy; "they are synonymous", "phytotherapy = herbal medicine", "phytotherapy is Latin for herbal medicine" (sic).

This immediately suggests the question of whether such a distinction is a construct of the researcher's hypothesis based on faulty assumptions and/or poorly expressed. However the majority of these responses also referred to 'traditional western herbalism' and, especially, a broad "holistic approach" to their practise. They appear to accept scientific data and the methods for gathering that data on herbal medicines as support for a practise of healing that has more in common with traditional notions of herbalism than medical science. This was the most common concept expressed by all respondents (app. 75%). Could there be a terminological confusion or ambiguity in either the

research enquiry or in herbalists understanding of their own practise? One herbalist from south-east England considers "true phytotherapy" to "treat the whole person", that the "body heals itself", and "herbs help the target organs to function better and 'heal up'". These three concepts match historical descriptions and definitions of herbal medicine rather than any modern scientific medicine. A herbalist in north-west England saw "herbal medicine and phytotherapy as two sides to the same coin. Despite a scientific training prior to herbal medicine, I practise in an intuitive way. I consider it essential to have a firm scientific base before the artistic nature of herbal medicine can be expressed".

As mentioned above, most respondents were trained by the School of Phytotherapy which has a curriculum that includes several modules similar to those of medical science training in a medical school. I would suggest that during training and study for any endeavour the majority of students become practised in the use of specific terms that may not be subjected to scrutiny or analysis in a linguistic or semantic manner. Terminology becomes accepted as understood in the sense and context first presented to the student and thereafter may often be used freely without further consideration. This is not a suggestion implying acolytes learning at the feet of pedagogues or implying a 'superior' understanding of terminology held by an outside researcher. If one studies and trains to practise a form of diagnosis that involves consideration of the patient as an individual located in an aetiology of physiological, pathological, psychological, sociological, and emotional environments, then prescribes medicines composed of herbal material, and one is told throughout one's training that this is phytotherapy, then that becomes one's understanding of the term. This is the 'emic' or 'inside'

understanding of the term rather than an 'etic' or 'outside' understanding (Pike, 1967). Whilst Pike admitted that his distinction was "partially arbitrary" (p.37) and suggested that neither is more important than the other (p.40), his work has engendered much academic debate.

An etic approach considers culture and language from the point of view of an objective observer with their own, often theoretical, understanding which is based on their own culture and language. On this basis it can provide a descriptive system equally valid for all cultures. Culture, taken to be outside the individual, is a factor of influence that should be able to explain differences in cognition, learning and behaviour. However, this does assume that culture is monolithic and a fixed influence on the individual. It denies any idiosyncratic relationship to the prevailing culture — many people in contemporary society now adopt multiple features of several cultures to form their own individual cultural identity that sometimes ignores the 'traditions' of the prevailing culture. An emic approach attempts to consider culture and language from the point of view of the bearer of the culture and the user of the language — it accepts, and often highlights, the relativity of an 'outsider's' view. The prevailing culture is taken to be an integral part of the individual as a member of the society in which that culture prevails. Using an emic approach relies on self-reports and explanations that are by nature subjective and hence open to misrepresentation or misinterpretation. Social norms can influence expressions of self-representation and explanations of language and/or behaviour can be re-interpreted with the benefit of hindsight. Some writers have denied the validity of an emic understanding suggesting, as Hymes did (1970, pp.281-282), that native speakers are neither conscious of their emic system nor able to formulate it

for their investigator. Bourdieu also refers to subjects not knowing how they act or relate to their environment (1977, p.79) and argues that a person "is no better placed to perceive what really governs his practice and to bring it to the order of discourse, than the observer" (1990, p.91). Other writers, including many anthropologists and social psychologists, argue that an emic approach is the only way to reach an understanding as any valid understanding has to be in the terms of whatever is being studied (see Headland, 1990 for an overview).

There appears to be a strong argument that specific terminology should be understood in terms of how those intimately connected to that terminology's use understand it and in that sense the *practise* of herbal medicine is now often called phytotherapy by herbalists. However, the arguments and rationale offered for this particular research do seem robust enough to explain how phytotherapy is *presented* as a scientific medicine through association with concepts and ideas usually associated with medical science.

The majority of herbalists seem to accept phytotherapy as a more up-to-date term for medical herbalism that takes more cognisance of scientific understandings of the herbs used in practise rather than solely relying on traditional and historical understandings. However many herbalists are aware of the consequences in representing medical herbalism in a scientific manner of language and reliance on scientific methodology. The practise of medical herbalism has not significantly changed but the representation of medical herbalism has been gradually aligned with scientific medicine. Some herbalists have expressed similar ideas and immediately recognise the distinction between a scientific phytotherapy and a more empirical herbalism (13 from 87).

A herbalist in north-west England does not differentiate between the terms but "I feel the term 'phytotherapy' is an attempt to make the practice of herbal medicine sound more scientific" (underscore in original). Yet another herbalist in north-west England regards "phytotherapy as a misleading term. It bridges what some regard as the gap between scientific theory and empirical knowledge". A Midlands herbalist suggests that phytotherapy is "attempting to fit herbal medicine into an orthodox model" and a herbalist in the west of England considers the term 'phytotherapy' as "a way to attract scientists and orthodox medicine". A herbalist in London perceives phytotherapy as a "pharmacological and pharmacognistic categorisation of plants" and that it uses "western rationalist medicine as a framework of understanding". Another west of England herbalist considers phytotherapy in a similar manner believing that it is "more acceptable to those who see healthcare as a purely scientific area". Similarly, a herbalist in south-east England personally considers "phytotherapy is the Latin name for herbal medicine introduced as an attempt to gain further orthodox recognition. Herbal medicine does not need this, it stands on its own merits". Phytotherapy "seems to be a political term used to give professional credibility" according to one herbalist in the west of England and a herbalist in north England suggests the term was introduced in "the search for a 'respectable' name". Another Midlands herbalist considers phytotherapy to be "a slightly pretentious term for herbal medicine possibly employed by those engaging in professional one-upmanship". A herbalist in south Wales considers "the term has been used to diminish the practice of herbal medicine. It's a way of separating oneself from one's patients, like a white coat, and looking clever". Several herbalists voiced the view that 'phytotherapy' was promoted by noted

herbalists and herbal institutions as a strategy with European Union harmonisation in mind. This was admitted by the Secretary of the European Scientific Cooperative on Phytotherapy, Simon Mills. He said that "to be relevant in a modern world" it was necessary to adhere to a scientific framework and that this was "the prime motive for our promotion of terminology that was acceptable throughout Europe and left the negative connotations of herbalism" (pers. comm. 1999).

Not all herbalist organisations and publications wish to pursue acceptance through a change of viewpoint regarding herbal medicines. The British Herbal Practitioners Association and its sister organisation The European Herbal Practitioners Association seem able to address the requirements of statutory acceptance and regulation without referring to herbal medicine as scientific. They seek legitimation for medical herbalism as an independent medical discipline. The Chairman of these associations — and the prime mover in establishing them — is Michael McIntyre. He suggests that the use of Latin and Greek terms "prevents patients from understanding what is being said about them and gives an impression of the expert handing down wisdom from on high" (pers. comm. 1999). He continued "the use of the Greek 'phytos' = plant as a substitute for 'herbal' sends a message that that we now have expert herbalists who are scientific and nothing to do with all those 'old wives' tales' which have characterised the practice of herbalism". He is "happy to be called a herbalist not a phytotherapist !!" and believes that "the wedge driven by the use of Latin and Greek names between patient and practitioner should be avoided".

The *European Journal of Herbal Medicine* is published by the National Institute of Medical Herbalists and replaced the previous publication of NIMH, *New Herbal Practitioner*, in 1994. The first Editorial referred to the new journal's title and gave the rationale for its title as "we affirm our wish to make the profession of herbal medicine better known on the European stage and to offer a place where debate can occur on issues relevant to herbal medicine across Europe" (EJHM, 1994 p.1). Its intent was "to publish material of high quality on all subjects relevant to the practice of herbal medicine, creating a forum for sharing information and opinion about developments in the field, including scientific, professional and political issues of importance to us as medical herbalists" (ibid.). Throughout the subsequent issues there are few, if any, uses of the term 'phytotherapy', and in the past it has published several studies that refer to scientific concepts and pharmacological understandings of herbs yet the studies have been framed in a clinical context of medical herbalism.

Representing Phytotherapy in a Sociocultural Environment

The process of refining and adapting herbal knowledge is not new; Brown (1985) refers to the disassociation of herbalism from astrology at the beginning of the 20th. Century (p.81). Brown notes this in reference to herbalists' attempts to form a unified association that could seek professional status for herbalists. In this respect it can be viewed as a strategy of amendment in the representation of herbalists to British society. Sharma (1996b) considers that professional knowledge of complementary practitioners has to be acceptable to the state, orthodox medicine, and the general public (p. 165).

Concentrating on the Society of Homeopaths and its claim to knowledge, Sharma describes a "cultural landscape" (p., 166) in which homeopathic knowledge may be located through the Society's outward representations which are developed by an internal discourse. In a similar manner British herbalists seem to have developed a representation of medical herbalism that is within a framework of medical science and appears to have been constructed to accord with the sociocultural environment of contemporary Britain. This is a sociocultural environment in which the politics of government affect that environment and in which, generally, the orthodox medical professions have some influence in forming perceptions of medicine in the minds of policy-makers and the general population. Despite an apparent doubt within a part of the British population of the complete integrity and abilities throughout the medical professions, there remains a strong cultural deference to the medical professions in British society.

Medical scientists usually form a consensus of approval for what is deemed scientific medical knowledge and reject other knowledge as non-science, pseudo-science, or deviant science. What was once deemed non-science or pseudo-science may become acceptable as approved science. Conditions in which this may happen have been suggested by Dolby who suggests three ways in which pseudo-science may become accepted by academic experts and therefore acceptable as orthodoxy (Dolby, 1979, p.41), and suggests three further ways in which pseudo-science may actively change towards a position of acceptability (ibid., p.39). Of relevance to this research is one particular course of action towards acceptability.

Ideas expressed in non-science or pseudo-science — here traditional herbal medicine — may become re-presented or re-formulated to meet the perceived criteria for public and/or academic acceptance. Dolby describes how Scientology was re-presented as a religion — and therefore liable for a statutory right to existence — when adversely criticised as a social movement. Dolby also cites the Mormon abandonment of polygamy as a re-formulation of translated scriptural knowledge. The re-presentation and re-formulation of herbal medicine as phytotherapy seems to accord with this particular model of change described by Dolby. As a scientific medicine phytotherapy becomes acceptable to an orthodoxy of medical science and as a re-formulated knowledge within a scientific paradigm it distances its history of irrational mythology and folk-lore. Phytotherapy becomes represented in a sociocultural environment as a scientific medicine through its language and form of presentation that re-presents herbal medicine. The 'trappings' of orthodox science — Gross' "rhetoric of science" — is now matched in the representations of phytotherapy. The empirical and clinical knowledge of herbal medicine is re-formulated through the more socioculturally recognisable quantitative science of pharmacology.

Of a less determinate and quantitative nature are ideas expressed by two spokespersons of certain herbal institutions. The two ideas both attempt to account for herbal medicine through scientific theories of understanding the natural world. They are markedly different yet can be shown to have indeterminate boundaries between them. Simon Mills, Secretary of ESCOP, devotes much time and effort to promote the acceptance of phytomedicines within a framework of the biomedical sciences, he considers this especially important in questions of safety for "to be scientifically shown to be safe is

perhaps more important for acceptance by governments and their advisory voices from the medical professions". As a possible explanation for the action of phytomedicines he has suggested the application of Chaos Theory to considerations of the relationship between a patient's physiology and medicines. Chaos Theory was originally developed from mathematical considerations of dynamic systems and in this respect had initial ramifications for the physical sciences of engineering, fluid dynamics, and quantum physics. In a perhaps oversimplified form, it states that, in a changing system, a small difference that may be imperceptible will be magnified over time to become perceptible in its effect (Gleick, 1988 provides a concise and clear introduction to Chaos Theory). Scientists in other fields found it useful and applied it to other dynamic systems including biology, ecology, and psychology (Sankaran, 1994). As a theory that helps to understand complexity in a complete system and includes notions of introducing a small agent to affect the complete system, Mills argues that this could account for the action of phytomedicines in the complex system of human health. It "encompasses much of the philosophy and scientifically unproven aspects of herbs as medicine". Chaos Theory is now recognised as an orthodox scientific concept and, if applied in a manner acceptable to the scientific community, gives credence to whatever it was applied to. This may be why Mills has applied it to phytomedicines: as Dolby argues the outward signs of scientific orthodoxy, in its terminology and reference to accepted science, makes phytotherapy more likely to be accepted by orthodox science.

A Scottish School of Herbal Medicine was established in 1992 with aims to provide a balance of science and art in its teaching. Its 4 year course has modules that not only include anatomy, physiology and patho-physiology derived from recognisable medical

training, but also nutrition, aromatherapy massage and remedial massage to encompass wider aspects of healthcare. The School promotes an holistic approach that views healing as an art using science as a tool. On successful completion of the training a Diploma in Herbal Medicine is awarded and this has been accredited by NIMH for membership qualification. In contrast to the School of Phytotherapy the Scottish School appears to be concerned with the continuation of traditional herbalism, the continuation of traditional terminology, and the continuation of the traditional philosophy underlying herbalism. A further distinction between the two Schools is the repeated use of 'phytotherapy' in one School's published prospectus and the absence of the term in the other School's published prospectus.

In interview the School's founder and Director of Education, Keith Robertson, stated that he wanted to develop a course that "investigates an energetic approach". He distances his approach to healing from biomedicine and pharmacology as they are "not where our roots are at all, that's not how we developed as a profession". He argues that if herbalists do not retain a separate identity from orthodox medicine "then orthodox medicine is simply going to incorporate us". Rather than develop a course that could be externally validated by a university as a BSc "we've chosen to stay out of that and remain autonomous". However the University of Wales validates the School's Diploma and offers an option for a research-based MSc in Herbal Medicine. The scientific concepts that have been agreed for this degree are those described by Goethe. Briefly, Goethe considered that the subject is as important as the object — the investigator's subjective perceptions are as important in revealing the nature of the object of investigation. Goethe suggested methodologies that tried to incorporate his ideas into

scientific research rather than the more usual constant striving to develop methods that attempted to remove the scientist as a subjective interpreter of observations. The School utilises Gothean science in its course and Robertson admits that "on the face of it it sounds quite wacky". He explained, "we're observing a plant up until the stage where we feel that we've met something within the plant" which gives them a "personal intuitive connection with herbs".

This may appear to be two extreme viewpoints and as such readily discernible with discrete boundaries. However both viewpoints, as epitomised in the ESCOP member's and the Scottish School Director's comments, share certain characteristics that make any boundaries indeterminate. Chaos Theory is an application of mathematics to orthodox science and to use it in consideration of herbal medicine would seem to associate herbal medicine with science. However here it is used in its most theoretical form to talk in terms of "rebalancing the Vital Force" — a force that orthodox science finds difficult to accept. Similarly, the Scottish School maintains the tradition of herbal medicine whilst espousing a form of science that is becoming more acceptable to orthodox science (Stephenson, 1995). The almost metaphysical Chaos Theory used in relation to the metaphysical Vital Force and the metaphysical indivisibility of Goethean science used in relation to an empirical tradition confounds any boundary between science and tradition. However, both demonstrate a close association with orthodox science, although Robertson's ideas associate with Goethe's conception of science which has yet to be fully endorsed by all members of a scientific orthodoxy. Mills' idea is much closer to current orthodox science and might be combined with the biochemical

representations of herbal medicines to be so like orthodox science as to be acceptable to medical scientists.

The indeterminacy of science as an homogenous whole and the shifting boundaries of medical science has, nevertheless, prevented medical herbalism from being accepted. It has been considered non-science, deviating in its explanations from the path of scientific progress towards understanding the natural world. The re-presentation of medical herbalism as phytotherapy — with all the language and rhetoric of pharmacology — demonstrates to a scientific orthodoxy that it is not deviant. Mills' application of Chaos Theory bedecks phytotherapy with a scientific understanding and may contribute further to its acceptance as a 'science'.

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[1] Two particularly important changes are the increased popularity of herbalism within a general increase of interest in alternative and complementary medicines and the immediately apparent gender differential in numbers of herbal practitioners. The number of women practitioners now far exceeds the number of men practising. This may be a reflection on the current economics of small commercial enterprises. Most herbalists are part-time practitioners and, it could be argued, fewer men are dedicated enough to the principles of healing to establish an enterprise which provides less than an acceptable full-time income.

[2] There is a parallel here with Culpeper's Herbal of 1649 though the authors had different reasons. Whilst Culpeper wanted to make knowledge of medicines available to people ignorant of Latin in the hope of showing how medicines could be cheaper than the prices charged by physicians, Valnet wanted as many people as possible to understand his form of medicine.

[3] Several herbalists and advocates of herbal medicine have been initially trained as scientists or referred to herbal medicine in 'scientific' terms as understood at the time. Culpeper was as 'scientific' as other apothecaries of his time studying and applying Natural Philosophy. At the beginning of the 20th. century the Society of Herbalists was formed with Hilda Leyel supplying the necessary finance (Griggs, 1997, p.258). Leyel initially studied for medicine before applying herself to the promotion of herbalism. She published a Herbal in 1931 that made use of earlier works of Maud Grieve (a Fellow of the Royal Horticultural Society) who designed and ran courses in the cultivation of medicinal plants. The compiler of *Black's Medical Dictionary*, Dr. William Thomson, has a noteworthy biography in medical science of the 20th. century. In his *Herbs that Heal* (Thomson, 1976) he notes the many instances where herbs have been found to have therapeutic properties that confound "the arrogance of scientists . . . [who] have assumed that all new drugs must come from the laboratory" (ibid, p.7).

[4] The methods used are the commonly used laboratory methods which entail experiments on animals — usually rats, mice, and guinea-pigs. Many herbalists seem resigned to these laboratory methods, but many others decry these methods and perceive this as yet another distinction between the philosophies underlying herbalism and phytotherapy. There are also many herbalists who would prefer additional pharmacological knowledge about herbs as long as the methods used did not include experiments on animals. (cf. *European Journal of Herbal Medicine* vol.4, Nos. 2 & 3, 1998 & 1999)

[5] The author, F. Fletcher-Hyde had for many years advocated pharmacological analysis to augment herbalists' knowledge of herbs but seems to have consciously avoided the term 'phytotherapy'.

Chapter 5 — Professional Practise

In this chapter I give a brief account of herbalists' practise as reported by herbalists in this research and comment on a commonality amongst herbalists that was unforeseen. It would appear to be important as it was not originally sought and relates to a theme of professional practise that was not in the design of interviews, yet it may help to explain some of the attitudinal responses to designed questions. The variation in knowledge gained whilst studying and the knowledge used in practice is then described with Foucauldian ideas of knowledge dislocation considered alongside Bourdieu's concepts of 'doxa' and 'cultural capital'. It is suggested that these contribute to an understanding of institutional knowledge having a role as part of an institutional identity within society whilst herbalists themselves maintain a cultural identity that is more fixed and historical.

Practice statistics

Of the 158 herbalists approached via the questionnaire, 87 returned the questionnaire and of these 48 were willing to be interviewed. Questionnaire responses and interviews furnished data relating to herbalists' practise in terms of how they practised, when they practised, and where they practised. Classifying an average of over 30 hours per week as full-time practise, only 25 practise full-time, 26 practise an average of 8 hours or less per week, and the remaining 36 divide equally in categories of 9-16 hours and 17-30 hours per week. Only 16 practise on 1 day per week, 15 practise on 2 days per week and a further 15 practise 3 days per week, whilst 29 spread their practise over 4 days per week. The remaining 12 reported practising on 5 days per week. This illustrates the

position of medical herbalism in the medical marketplace. The number of patients would appear to be too small to sustain a full-time practise although the majority of respondents reported counts of between 50 and 300 patients. The widely differing counts could reflect a possible ambiguity in the question which simply asked for the number of patients. It could have been read as referring to the number currently undergoing treatment or the number of patients in the herbalist's records. One herbalist, who is also a GP, answered "800 patients on my GP list and all may have herbal treatment if they wish, I'm currently treating 20 patients with herbal medicine". However, as herbalists typically spend between 45 mins. - 1 hour for each initial consultation and 15 - 20 mins. for each subsequent consultation for the same condition, the herbalist does not need as many patients as a GP to warrant a full-time practise. It should be noted that herbalists were asked for average times and numbers. In interviews many herbalists related anecdotes that suggest a pattern of longer hours of practise. For example, one herbalist reported an average of 20 hours per week over 5 days, then later referred to time spent checking and maintaining records — "up to 2 hours after each session" — preparing herbs at weekends, and practice administration — "I do my office-work in the evenings when the children are in bed".

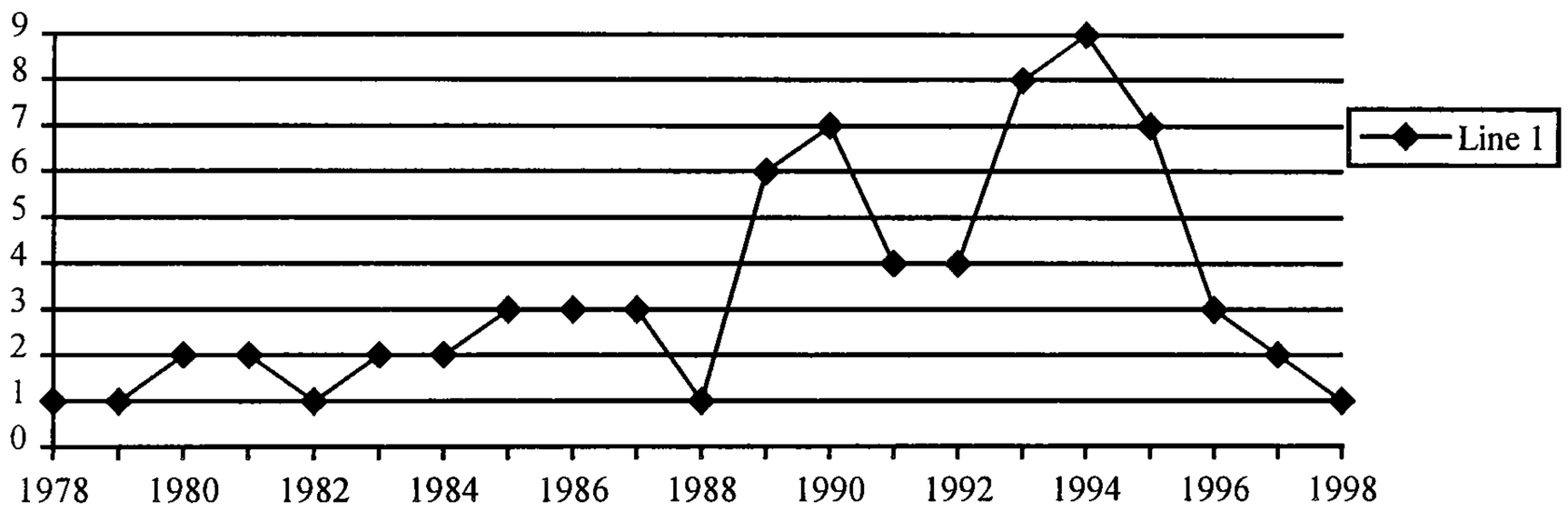
This particular herbalist practises from their own premises and at a complementary health clinic. 8 other herbalists practise at 2 or more sites including their own premises. 3 herbalists practise within a GP's clinic either as GPs themselves or as a complementary practitioner. 38 practise in their own premises, 27 practise within a complementary health clinic, and 5 practise in shared premises with others (e.g. the first floor above shop premises). Many practise from their own premises but this does not

mean just a spare room in their home — several herbalists have well-appointed purposely-designed premises independent of any accommodation. The herbalists I met who do practise from their home had a section of the building with a separate entrance and this section was kept apart from the home by secured doors and its specific function as consulting rooms. Nearly all herbalists buy their herbs from a herbal supply company which guarantees unadulterated natural products though several augment their supplies by growing their own common herbs. The days of foraging in fields and hedgerows seem to have almost disappeared.

The majority of the respondents (74) were trained at the School of Phytotherapy, one respondent had gained a BSc in Herbal Medicine at a university, and 9 had studied through the International Register of Consultant Herbalists. A few (3) had trained alongside an established and experienced herbalist prior to study and accreditation through the School of Phytotherapy. The School has maintained a similar curriculum and requirement for successful completion since its establishment as the School of Herbal Medicine. It seems that the curriculum was amended slightly in 1982/1983 to account for a greater prominence of pharmacology and biochemistry with a stronger emphasis on the 'science' in herbal medicine. As only 9 respondents qualified prior to this time it can be assumed that most of the respondents reflect a training that had the scientific framework of contemporary times. During interviews several herbalists remarked on the level of study required and the high standards for successful completion. One GP who also trained as a herbalist stated that he found it to be "of a very high standard". (Indeed, two Chinese doctors, who had studied Western Medicine and Traditional Chinese Medicine at Beijing, commented that their 4 year course had

not included as much bio-medical science as the School's curriculum.) Herbalists, as other medical professionals, revise and expand their understanding of herbal medicine by regularly reading journals (few restrict their regular reading to just one journal). The majority (65) regularly read the *European Journal of Herbal Medicine* and the *British Journal of Phytotherapy* (40). The *Journal of Alternative and Complementary Medicine* and *Herbalgram* is included in 13 respondent's reading while the *British Medical Journal* and the *Lancet* are regularly read by only a few (11 and 6 respectively). *Phytomedicine* had 5 reports of regular reading and lesser-known journals, including titles associated with nutritional therapy and natural medicine, were also reported.

These are the 'bare facts' of medical herbal practise — the quantitative data that can be represented graphically, statistically analysed, and discussed. For example, the numbers of herbalists who qualified in each year produces a graph as shown below.



The greatest numbers appear in the first half of the 1990s; remembering that it takes at least 4 years to qualify, why did so many people decide to study for qualification as a herbalist in the latter half of the 1980s? What were the social and socio-economic factors involved? Was there a change in work patterns towards a decline of long-term, fixed employment, coupled with opportunities to become independent through 'business start-up' schemes? Such questions are not within the intent of this particular

research. but this quantitative data does provide an outline of the practise of medical herbalism in contemporary Britain; an outline that may be perceived as showing a number of qualified individuals practising in their own premises or alongside other practitioners of complementary therapies on a part-time basis. However only 36 respondents reported another occupation as well as their herbal practise, of these only 3 reported herbal practise as their prime source of occupational income. Could this outline be interpreted as also showing a group that includes individuals only concerned with a part-time occupation, or individuals less than conscientious in practising herbal medicine and therefore merely 'dabblers' and dilettantes? It would seem that very few respondents can gain an economically comfortable living by practising herbal medicine only. The qualitative data from interview responses and commentary by herbalists themselves provides a more detailed picture of herbal practice and in this research provides details that serve to illuminate the picture and details that were unforeseen which may provide an answer to why so many herbalists continue to practise without being full-time professionals.

Beyond the mechanics of practice

The dividing line between a researcher's objectivity and cynical scepticism may be as fine, or indistinct, as the dividing line between objectivity and passionate enthusiasm for the subject of research. Within a capitalist society of late modernity, such as contemporary Britain, it is sometimes easy to be cynical. Constantly changing trends and fads engender new markets, new products, and new services — or sometimes the re-presentation of goods and services to share in the market. One comparatively recent

burgeoning market has been the market in natural/organic foods (perhaps as a backlash against homogenised, standardised, and processed foods that may, or may not, be nutritionally deficient). These natural foods have been presented as nutritionally beneficial, beneficial to good health, ecologically beneficial, non-toxic, and more wholesome (or 'real') than processed foods — ultimately of benefit to society and intimating a less profit-driven motivation than commercial food-processing. Some entrepreneurs have undoubtedly engaged in the growth, distribution, and sale of such foods for commercial reasons only: the market is there and all markets have to be supplied by somebody, so why not be that somebody and make money. It was with such a cynical awareness that this researcher approached the practise of medical herbalism in Britain and the location of herbal practitioners as professionals.

Although questionnaires were obviously only returned by those herbalists who wished to complete them and interviews were conducted with those herbalists ready and willing to be interviewed about herbalism, one common factor emerged from all respondents. In no response could I construe a sense of opportunism or commercial self-interest as motivators for their practise. When asked about their recognition as professionals all respondents expressed a prime concern overriding any attribution of status was their desire to practise "for the good of my patients". Notions of social status, economic advancement, or acceptance by orthodox medical professionals seemed secondary to continuing their practise "to benefit those people seeking herbal medicine". The concept that is forced into consideration here is *altruism* — a concept of self-interest being secondary to acting for the benefit of others. Although Parsons in his early work argued that it was pointless to distinguish between altruism and self-

interest in professional practise (1939), he revised his position some years later and noted altruism as one of the defining factors of a profession (1954). His earlier point can be argued perhaps from a philosophical viewpoint: a nun aiding and supporting the sick and the poor in the slums of Calcutta may seem almost saintly in her selflessness, yet her actions are ultimately driven by her desire to act in a way that assists her own salvation or heavenly reward. However altruism does seem to exist as a recognisable service orientation — i.e. a conscientious undertaking to act for the benefit of fellow beings. This is more than Hogan et al's definition of service orientation as " the disposition to be helpful, thoughtful, considerate, and cooperative" (Hogan et al, 1984). Nor is it limited to a consumerist approach to the commercial provision of services as has been identified and considered sociologically in several studies — e.g. Hyland (1996), Shuval and Bernstein (1996), and Otto and Schuurschuch (1999). Altruism seems to go beyond this with perceivable signs of empathy, caring, and support for others. Few people would completely doubt the sincerity of a nurse stating that she/he enjoys caring for patients: to argue that the nurse has misguided and naive conceptions of a 'vocation' cannot adequately explain why someone should endure the work expected of a nurse — and nurses' salaries are not usually noted for being commercially competitive in the employment market. Similarly, does a fireman get adequate commercial compensation for risking their life to save another life, or is it accounted for by a less than intelligent display of machismo and physical prowess? I would suggest that altruism is manifested by the many people who obtain 'job satisfaction' from an occupation that entails acting for the benefit of others regardless of financial reward or social prestige.

From the early studies of professions to more recent studies many writers have attributed a sense of altruism to professional practitioners (e.g. Flexner, 1915; Carr-Saunders & Wilson, 1933; Barber, 1963; Wilensky, 1964; Moore, 1970). These studies have often been considered too simplistic or imbued with an idealism that may be traced back to some form of Victorian patriarchal benevolence — the professional as the selfless servant to the good of society. Thus an image of a professional was constructed that illustrated a kindly 'father figure' caring for those less fortunate — in knowledge, intellect, social condition, or health — than himself. With this 'popular' image it can be perceived from much Victorian literature (journals, reports, and fiction) that a prevalent perception of a professional was as a 'gentleman' — diligent study and rigorously careful practise of skills and expertise were thought to be only available in a professional occupation. The professional practitioner was an upright conscientious individual who could not be a rogue or charlatan because long years of study and the service orientation of the profession precluded such an idea. As has been mentioned in chapter 2, the professional was sometimes regarded as a moral example. Carr-Saunders and Wilson stated that the professions were "centres of resistance to crude forces which threaten steady and peaceful evolution...[they]...stand like rocks against which the waves raised by these forces beat in vain" (1933, p.497). Societies change and in contemporary Britain it would be difficult to agree with notions that a professional sense of altruism equates with exemplary morals, although, more recently, Halmos has implied that personal service professions still display a morality that is socially beneficial (1967).

Given the widely accepted contemporary sociological view that professions are an occupational category that can be best understood by referring to notions of occupational closure and the sociopolitical or socioeconomic power to effect occupational closure, it is perhaps easy to disregard earlier notions of professions being recognisable by an element of altruism. Whilst Grant (1997) argues that social sciences have been inadequate in explaining a transcendental reality such as altruism, from much of the writing on the sociology of professions it could be inferred that altruism can be considered a constructed reason for occupational status, privilege, and power that masks the self-serving interests of a group and therefore dismissable as occupational ideology. Such a theoretical understanding of professions could be considered 'antiprofessional' in denying the concept of an 'ideal' profession, or validation for considering any profession susceptible to criticism for being less than ideal. For many writers this has led to detached and objective theorising that does not admit transcendent ideas of caring for, and about, others and appears to homogenise all occupations in terms of the market. Johnson argued that a profession is not an occupation but "a means of controlling an occupation" (1972, p.45) whilst Larson stated that professionalisation was a process whereby "producers of special services sought to constitute and control a market for their expertise" (1977, p.xvi). Such ideas of occupational control and closure are referred to by McKinlay (1973) in one of the most critical considerations of professions where he refers to the "mythology of professionalism" (p.61 et seq.).

Although now somewhat dated, McKinlay's work does seem to express a continuing element of doubt regarding professionals as moral members of society engaged in

model occupations that benefit society. McKinlay considers professions and how they "influence the initiative, direction and rate of social change" (p.62). He asserts that distinguishing professions from any other occupation is illogical and that sociologists "have uncritically accepted the claims and assumptions of the subjects of their study to an extent which would be unforgivable in most other areas of sociological enquiry" (p.63). He cites earlier sociological studies to critique them, and thereby illustrate his point, but seems to be unable to forward any radical alternative. Part of his critique is to question the sociological usefulness of associating professions with recognisable traits that distinguish them as professions, but his argument seems to be built on direct attacks on, or rejection of, these same traits without adequately demonstrating the failure of trait theory to be useful. He completely rejects one trait when he refers to professionals' "supposed altruism" (p.67,). He goes on to suggest that the representation of professionals having a "selfless devotion to their clients in the pursuit of a higher ideal", can be found in advertisements and planned news releases (ibid.). McKinlay further asserts that the "gullible public" may be "generally unaware of ways in which they are carefully engineered to perpetuate the myth of altruism" (ibid.). He appears to perceive a threat to social change from professions and warns that "the power and influence of several dominant occupations is approaching almost ruling class dimensions" (p.78). McKinlay concludes by accusing professionals of "active obstruction" (p.79) to social change and suggests that this "provides the clearest demonstration of naked power and its ramifications, and the falseness of professional claims to knowledge, trust, altruism and ethics" (p.79-80). It may be very welcome to pause and reflect on any body of knowledge or to critically review studies within a particular field or theory, it may even be considered as a healthy necessity to question

basic assumptions or the foundations of a theory, but McKinlay's paper could be argued to be particularly aggressive.

The cynical, antiprofessional view expressed by McKinlay is, I would suggest, beyond dispassionate objectivity. His, almost vituperative, language seems to be more of a rant against professional status, autonomy, and power than a considered analysis of professions within societal change. As with most polemical assertions there is undoubtedly an element of realised truth within it, though more often found in more measured tones amongst the many volumes of sociological studies that have focused on professional power. However McKinlay's argument, agreeing as it does with the tenor of many latter-day studies of professions, is less than robust for two particular reasons. Firstly, his account was created from observations in an American society that promotes free commercial enterprise as a culture and within such a commercial culture the structures of service professions may not allow altruism to be such a visible factor within the professional marketplace. Here in Britain, and more specifically healthcare in Britain, despite a recent resurgence in what could be termed 'commercial liberalism', our sociocultural environment would seem to still retain (at least an expectation of) a professional service orientation that maintains a conscious undertaking to practice for the good of fellow beings. Other studies that have concentrated on professional power may not be so declamatory against the possibility of altruism in professions but they do seem to overlook any significant influence altruism may have on a profession's exercise of power. The second weakness in McKinlay's argument is lack of supporting evidence. McKinlay does cite studies and refers to various reports to support his argument but does not add weight to his argument with any empirical data. Batson

(1991) forwarded empirical evidence of altruism by describing behaviour rather than any claims to intent. In this research empirical evidence confounds McKinlay's argument by revealing many instances when altruistic sentiments were expressed by contemporary British herbalists without being part of an advertisement or planned news release.

All respondents made comments that refute McKinlay's assertion that altruism in the professions is a myth. A common statement was that the herbalist would "carry on doing the best I can for my patients" regardless of interprofessional status or acceptance. A Welsh herbalist epitomised this in saying "I practise to the best of my ability in the most professional way for the good of my patients". Statements such as these may not be a rarity from other professionals but they are more commonly accepted as attributable to the medical and 'caring professions'. One herbalist in north-east England talked of "a caring ethos" in the practise of herbalism which is manifested in "caring and concern for individual patients". A Scottish herbalist who had been a Scientific Officer in the medical laboratory of a hospital pathology department said "In my experience herbalists are the most caring, supportive and democratic groups of people". Such a statement from someone who has been a respected professional in an accepted caring institution that is popularly perceived to exist for the good of patients, surely indicates the caring ethos previously cited. Another Scottish herbalist practises in a rural area where unemployment is common so does not always charge the usual consultation fee and occasionally visits patients in their own home when circumstances of illness or cost of transport make it difficult for the patient. A herbalist in a much more affluent town in south-east England also occasionally waives a full consultation

fee; "If I take three hours to see a patient it's because I think he needs to talk about his problem and what the underlying cause of his problem is. It may take that three hours but it's not fair to charge him for the whole three hours. He's come to me for help and I do my best for my patients which does not include making a lot of money out of them". These statements, coupled to the logic that if herbalists wished to make substantial financial gain they would cease practice and simply sell pre-packaged herbal remedies, support an argument that herbalists are not primarily motivated by commercial profit. As one herbalist in north-west England expressed it "my patients come first". This idea was reflected in a London herbalist's comment relating to any legislation that would severely curtail or completely ban herbal practise. Saying that such a situation "would be the worse for everybody" this herbalist did not mean just herbalists but "especially patients and patients' rights to choose treatment from a diversity of treatments". The prospect of EU legislation often gave rise to comments that could only be interpreted as indicative of a concern for patients. One herbalist in north England when referring to any ban on herbal practise said "I suppose if that happened some of us would have to go 'underground' again as we did before, I certainly would because I do this for my patients". Another herbalist in south-east England stated that they would "continue to practise for the benefit of my patients whatever the European legislation does". Notwithstanding any incitement to illegal action or stubborn assertion of individuality, these comments seem to suggest a strong sense of dedication to the perceived best interests of their patients — in other words, altruism.

Herbalists' concern for patients may not be peculiar to their professional practise but it does appear to be an overriding concern in their practise. The ideas expressed in the

quotations above are not unique to the quoted herbalists: phrases such as "the good of my patients" and "patients come first" were common in nearly every interview. As has been mentioned this aspect of professional practise was not accounted for in the design of interviews yet it recurrently arose. This may reflect the researcher's blinkered approach and concentration on the sociopolitical factors in a process of professionalisation or an assumption (common in much contemporary sociological thinking of professions) that altruism, if it does exist in a profession, is unremarkable. In this research all comments reflecting a sense of altruism were spontaneous and common in interviews and must therefore be worthy of remark.

It must be acknowledged that some herbalists could have been calculating and careful to project an acceptable image to an 'outsider', but this seems unlikely as the research was purposefully designed not to encompass ideas of the extent to which herbalists were ecologically sound, intelligent, spiritual, or caring. As a cynical researcher 'half-expecting' to meet at least one commercial follower of fads and fancies portrayed in 'Sunday Supplements' or at least one 'New Age' proselytiser, the research was designed with an awareness of possible evaluative judgements. The very commonness of these comments and remarks as asides to specific questions indicates either a uniform calculated adoption of a role, or a strong sentiment sincerely shared by herbalists. Even the most expressively wary respondent ("I only said I'd be interviewed because I wanted to see who you were and what you're doing. Tell me about yourself and what this research is for, then I'll decide if I talk to you") later confided to me their spiritual beliefs and did not appear to adopt a role. It would seem that altruism does exist amongst herbalists and accounts for the willingness to continue practise without

great financial reward or legitimation as a medical profession. The qualitative data that revealed herbalists' altruistic sentiments arose out of specific questions relating to herbalists' self-description of practise in terms of their training as phytotherapists or herbalists and their practise as phytotherapists or herbalists. Herbalists may have been imbued with a sense of caring and concern for patients during their period of training but it seems remarkable that such an apparent level of commitment should be so common. As with almost any study and training the actual practise that implements what has been studied is subject to the practitioner's individual abilities and predispositions. Herbalists' wish to practise 'for the good of patients' may affect their clinical practise as opposed to a practise determined by a training with a 'scientific framework' at the School of Phytotherapy.

Practise and Knowledge

The indeterminate boundaries between 'scientific' representations of phytotherapy and the more metaphysical 'vital force' central to the traditional philosophy of herbal medicine (chap. 4) can be extended to include Gross' 'rhetoric of science' in descriptions of the actual practice of applying herbal medicine. A herbal prescription is *formulated* to contain certain *measured* quantities of herbs, *observations* of the prescription's *effects* on the patient are noted and, if the *results* are not completely satisfactory, then the prescription is *re-formulated*. The *object* was to cease the patient's discomfort/illness, the *method* involved *quantified* application of materials, the ensuing *results* were *observed*, the *quantities* of materials were adjusted until the desired *result* was obtained. This, it should be emphasised, is not a 'hit-or-miss' practice but an art, or

craft, of expertise derived from learning and experience in much the same way as a GP may adjust the dosage of any medicine. However, although terms readily used in scientific reports — *object, method, quantity, result* — may be applied the rationality differs from accepted science. It is here where the difference is most acute: for the learning of a herbal practitioner is based on traditional knowledge that has been transmitted through several centuries in a less specialised language and without a positivist and reductionist philosophy apparent in modern scientific medicine. The knowledge of medical herbalism may have been complemented with biochemical assays and pharmacological study, and herbalism may now be transformed through scientific language into phytotherapy, but the practise of medical herbalism is still very much as it used to be.

As has been noted in the responses from herbalists, few describe their practise as a scientific practise. Whilst the majority of herbalists gained their qualifications by studying a curriculum structured within a scientific framework (and containing modules that might be acceptable in a medical school) for a science degree or equivalent, their practise is imbued with an understanding of the history and philosophies associated with herbal medicine. Beyond the curricular study of herbal history, in further reading and conversations amongst herbalists, they are aware of the empirical and clinical application of herbal medicine that contributes to the well-being of patients by actions traditionally understood as 'balancing' the body's own healing force.

Many herbalists acknowledge that their practise is tempered by clinical experience that is "informed by tradition" and within "a long tradition of physiomedical herbalism".

One herbalist said that they "sometimes use herbs in the symptomatic phytotherapy way but I am always aware of the larger picture". They went on to say that in their practise they "use holistic principles of treatment derived from physiomedical philosophy plus a knowledge of energetic medicine". Another herbalist suggested that institutional phytotherapy is an "attempt to bridge the gap between scientific theory and empirical knowledge, it blankets the crucial significance of physiomedicalism". They described their practise as "holistic with a philosophical difference that is vital". One herbalist, who is also qualified in Traditional Chinese Medicine, used the "energetic principles of TCM" as their "framework for diagnosis and prescribing, I do not feel that a purely scientific approach of phytotherapy gives very good results in the clinic". A practise description from one herbalist included the comment that they applied a "less scientific approach than some of my colleagues". A herbalist, who had been a research biochemist, practised "in an intuitive way" and considers that the "artistic nature of herbal medicine" is expressed in practise. This was echoed by a herbalist with a concurrent practice as a pharmacist who declared that "no amount of phytotherapy can replace a herbalist's intuition". One herbalist considers that herbalism "comes from a different philosophy to scientific medicine" and "would like to weave the two ideas of science and traditional herbalism" into their practise but ultimately considers clinical experience to be more influential to them.

One herbalist described their practise as "holistic-based, treating the whole person, using whole plant extracts and based on experiential knowledge as well as scientific research". Another herbalist argued that "phytotherapy makes herbal medicine sound more scientific, in my view it should be both an art and a science", good practise

incorporates "scientific knowledge alongside valuing clinical experience and traditional knowledge". Such views are not the preserve of herbalists, orthodox doctors also refer to an "art of medicine" (Good & Good, 1993, p. 91). Similar views were expressed by a herbalist who considers phytotherapy as "a political term used to give professional credibility" and that practise "should combine the tradition of experienced knowledge with scientific knowledge". Echoing this, one herbalist "make[s] the most of new scientific findings but base my practice on generations of empirical evidence and traditional practice". Maintaining a "more rational and scientific basis", one herbalist rejects "unassessed theories like 'energy' explanations" and "keep[s] to the physical, social and emotional aspects of a patient's condition". However they considered that "anyone involved in medical practice — including orthodox doctors — uses a more subjective appraisal of their patient's problems and needs alongside the objective appraisal, for example empathy with their situation may influence the final combination of prescribed remedies". All these descriptions would seem to illustrate a dynamic between training and experience, between formalised knowledge and practise. The theoretical and formal knowledge transmitted and represented by the School of Phytotherapy (all the quoted descriptions were from herbalists trained there) informs and shapes their practise but the immediacy of application and the context of application individualises their practice into a culture of application. Formal knowledge is not necessarily discarded but experience and reference to the traditions of herbalism seem to make certain aspects of formal knowledge recede in importance and relevance.

The anomaly (or discontinuity rather than a difference) between gaining institutionalised formal knowledge and putting that knowledge into practice with subtle

adjustments — 'knowing how' as distinct from 'knowing what' — has been noted by others and accounted for by ideas of knowledge and practise being contextual to location and situation (e.g. Latour & Woolgar, 1979; Ophir & Shapin, 1991). Freidson (1986, p.210) states that "Formal knowledge is systematically transformed by professionals with differing perspectives created both by the particular demands of the work they do and by the demands of their particular clients . . . exactly what knowledge is employed is problematic: it cannot be predicted from the formal knowledge ascribed to them". This variation from formal knowledge in its application may be due to an amount of "untidiness and indeterminacy" in formal knowledge as "some of the formal knowledge of any discipline is often expressed as alternative opinions or theories" (ibid., p.215). Good & Good (1993) refer to medical students sometimes being taught by physicians with differing claims to authoritative knowledge and thereby giving medical students a choice in understanding. Freidson agrees with Zussman's observation of the "primacy of experience over theoretical knowledge" (Zussman, 1985, p.70), and considers the formal knowledge that practitioners "actually use during the course of their work becomes something considerably less consistent and systematic than the formal knowledge purveyed by academics, becomes something considerably more individual and idiosyncratic" (Freidson, 1986,., p.216). Good & Good (1993) suggest that physicians must transform the 'science of medicine' into the 'art of medicine' in their practice — which would make the practise of medicine individual and idiosyncratic as Freidson suggests.

One theoretical framework for understanding, if only partially, the variation between formalised institutional knowledge and the application of knowledge remote from the

institution is Foucault's concept that "power and knowledge directly imply one another" (1979, p.27). Foucault suggests that knowledge/power relationships arise from a discourse that forms a knowledge system and that the network of strategies employed in the discourse produce such a relationship (ibid., p.28). The systematic totalising discourse of institutions forms a system of knowledge that has a disciplinary power to normalise that system of knowledge (ibid.) — the knowledge becomes ordered (Collins, 1985). In a pedagogical manner, even if not consciously or deliberately, institutional training — to a greater or lesser extent — determines relevant, valid, and acceptable knowledge that guides the behaviour of practise. It forms a shared schema of perception and valuation that is 'taken for granted' and becomes 'common sense'. The relationship of power/knowledge is strongest at the centre of discourse, the place where knowledge is made, and more readily discerned when applying Foucault's ideas to considerations of group institutions — especially where those group institutions also transmit the knowledge peculiar to the group. Medical herbalists gain their knowledge to practise from such an institution and initially accept the shared schema. It seems that once removed from the direct determination of knowledge in institutional training, herbalists can rely more on experience and clinical evidence (c.f. McMullin et al, 1996). The knowledge remains the same but experience becomes more valuable by its suitedness to herbal practise. Although Foucault's ideas have been subject to much study and critique (e.g. Cronin, 1996; Olson, 1995; McCarthy, 1991) they do provide useful explanations for the power that institutions have in determining bodies of knowledge.

Foucault's ideas agree, in some respects, with Bourdieu's notions of 'habitus', 'doxa', and 'cultural capital'. Bourdieu's conception of habitus is the body as embodiment of social location and the expression of social location within the body, or as he himself described it; "a system of acquired dispositions functioning on a practical level as categories of perception and assessment or as classificatory principles as well as being the organizing principles of action" (Bourdieu, 1990a, p.13). The socio-cultural environment structures the development of a practise learned as a bodily practise which is durable; this gives rise to dispositions to act in an accepted field of various social relationships and the accumulation of status or "capital" (Bourdieu & Passeron, 1991, pp.229-231). Habitus is learned by an individual as part of a group (it is socially determined), and individual habitus is a manifestation of group habitus. The fields of relationship that are instrumental in the production of habitus have been described by Bourdieu as "a network, or a configuration, of objective relations between positions objectively defined" (Wacquant, 1989, p.39). Because of the very 'naturalness' of habitus it is unconscious and 'taken for granted' as a silent tradition; being silent it is powerful in tacitly maintaining a normative social order — this is what Bourdieu terms 'doxa'. Together this forms his basis for a theory of symbolic power; structures of social interaction are embodied as habitus — habitus as a conformity to social rhythm — conformity maintained by the power of silent tradition — which gives an overall symbolic power of culture that legitimates itself and confers capital on group members. Institutionalised training provides herbalists with a 'doxa' and therefore a cultural capital within the community of herbalists, although not such a recognisable cultural capital within society. Clinical experience and practical experience provides herbalists with a slightly altered 'habitus' effected by the differing social rhythms of immediacy

and specificity in contact with patients. As with Foucault, Bourdieu has been subject to much comment and critique (e.g. Free, 1996; Williams, 1995; Jenkins, 1992), but his work does provide a laudable and useful description of aspects of community conformity and culture.

Herbalists appear to conform to a culture of concern and caring for their patients and a general regard for humanity and ecology. Many herbalists could be characterised (or caricaturised) as caring, diligent medical practitioners with a political philosophy that would not be amiss in a member of The Green Party. The modes of thought and action that appears to be widespread within the group of herbalists could be considered their culture within their community.

Community and Culture

A community may be considered as a bounded set of social relationships. The boundaries may be territorial, or based on shared interests and beliefs. (Some may be both territorially bounded and bounded by beliefs — e.g. the Amish community.) In this study 'community' refers to an aggregation of individuals in a bounded set of social relationships based on common interests and beliefs. The social relationships may not be corporeal but are implicit in the sharing of interests (similar to a notion of "imagined communities" (Anderson, 1991) where an individual is aware of other individuals in different places, and even in different times, yet all have — or have had — a common interest). Herbal practitioners in Britain may never actually meet every other herbal practitioner 'face-to-face', but their shared interest in practising herbal medicine forms a community boundary that excludes non-practitioners. Freidson (1986, p.211) considers professions to have "an occupational community that extends beyond any particular workplace, a community sustained by a common credential, common specialized training, a shared occupational identity".

Toennies argued that there were two basic forms of social groups: communities and associations — *Gemeinschaft* and *Gessellschaft*. While Gemeinschaft is a natural grouping, Gessellschaft is artificial; 'in the Gemeinschaft [people] remain essentially united in spite of all the separating factors, whereas in the Gessellschaft they are essentially separated in spite of all uniting factors' (Toennies, 1887 (1955), p.74). It was Toennies' view that over time the Gemeinschaft begins to disintegrate and Gessellschaft appears in which individuals become less and less attached to any

community, tending to become members of more and more groups. Toennies saw communities as natural and that their solidarity may arise from three sources — family, territoriality or friendship. "The Gemeinschaft by blood, denoting unity of being, is developed and differentiated into Gemeinschaft of locality, which is based on a common habitat. A further differentiation leads to the Gemeinschaft of...friendship...resulting from similarity of work and intellectual attitude" (ibid., pp.48-49). It is the final concept that is used here to relate to the community of herbal practitioners.

The concept developed by Toennies is similar to Durkheim's notion of mechanical solidarity as an explanation of social cohesion that arises out of similarity and leads to a collective conscience that influences group reasoning for actions. Durkheim's mechanical solidarity: "does not signify that it is produced by mechanical and artificial means. We call it that only by analogy to the cohesion which unites the elements of an inanimate body as opposed to that which makes a unity out of the elements of a living body...the individual conscience considered in this light, is dependent upon the collective type and follows all of its movements" (Durkheim, 1893 (1984), p.84). Durkheim's uniting feature of community existence (the 'collective conscience') is dependent on social relationships within that community, which includes the discourse and knowledge commonly held in that community — its ideology or culture. The interchangeability of the terms 'ideology' and 'culture' is difficult given the wealth of material attempting to define exactly what either term is. However, ideology and culture appear to be inextricably linked. The terms are used here to signify that ideology is the knowledge of 'what is' in the community and culture is the customary

practise in the community. By considering a community's acceptance and implicit understanding of shared meanings, beliefs, and history of the community — 'that's the way it is, the way we do things round here' — ideology, stripped of its interpretation as political dogma, becomes culture stripped of its artefacts but retaining its behavioural manifestations.

The philosopher Bertrand Russell defined ideology as a "system of beliefs leading to a line of conduct, both public and private, and supported, whenever it is politically important, by a priesthood or something analogous" (Russell, 1951, p.111). Many others have perceived ideology as an extreme or fanatical account of the world with a political element and this perception may relate to Marx's views of ideology. A Marxist concept of ideology may perhaps be too politically extreme to adopt in a sociological sense. It seems too simplistic and declamatory to assume that at any time the ideas of the ruling class are the ruling ideas. Likewise it seems too polemical to consider those ideas as 'false' or distortions of the 'truth' propagated by an elite ruling class to perpetuate inequality. However this does lead to a useful concept of ideology as something that makes the status quo seem legitimate and natural. Gramsci considered ideology to have three main aspects — materiality, a binding of social forces, and a relationship to the 'common-sense' of individuals. He argued that ideology was materially manifest in people's social practises and in the institutions and organisations in which those social practises occur. Ideology provides "a unity of faith between a conception of the world and a corresponding norm of conduct" (Gramsci, 1971, p.326), it formed "a cultural-social unity through which a multiplicity of dispersed wills, with heterogeneous aims, are welded together with a single aim, as the basis of an equal and

common conception of the world" (ibid., p.349). The perception is often uncritical and usually unconscious — 'the world is as it is'. Hecht (1996) argues that workplace practises and technologies specific to that workplace may not just be viewed in a materialist sense, in a cultural sense they can be considered constituents of an ideology in that workplace (p.518). Culture, as manifested in modes of behaviour and modes of expression, arises out of a unity of faith in a common heritage and tradition — it could be said to be a manifestation of ideology. From their responses herbalists appear to have a strong sense of community and are fully aware of their knowledge base gained whilst studying and the expectations of their behaviour in practise. However, as shown above, their actual practise is an idiosyncratic practise — the customary practise for herbalists is idiosyncrasy rather than uniform action rigidly applied from the formalised knowledge of the community's institution. Idiosyncratic practises do not preclude herbalists' sense of belonging to a community, "the bonds of identification of individuals with their group" (Elias & Scotson, 1965, p.103) appear to be strong.

Community identity and cultural identity

A sense of belonging brings social unification as a community, for it "needs no factors outside its own component elements, the individuals" (Simmel, 1959, p.338). However Simmel qualified this by stating "This does not mean, of course, that each member of a society is conscious of such an abstract notion of unity. It means that he is absorbed in innumerable, specific relations and in the feeling and knowledge of determining others and of being determined by them" (ibid.). Gilbert (1989) refined this general premise to suggest that it was not just a passive feeling of togetherness, but also a willingness,

demonstrated by interaction, to be recognised in the community as supporting the community's objectives and practice. For herbalists such a community is realised in their National Institute of Medical Herbalists. Herbalists interact in their community through newsletters, specific and relevant journals, and attendance at symposia and General Meetings. Their sense of belonging to a community forms part of their self-identity; a self-identity that can be likened to a cultural identity because it is an inner sense to the individual that enables a self-identity as part of the community. The community as an organisation has an identity; an identity perceived by its members and by a wider society. The community of herbalists contains more than one organisation, each with its own identity perceived by members and society. Organisations that might be perceived as promoting herbal medicine in the language and form usually associated with the sciences of biochemistry and pharmacology include the BHMA, ESCOP, and the School of Phytotherapy. The BHPA, its sister organisation the EHPA, and NIMH might be perceived as promoting herbal medicine as an effective and safe tradition of healing. Sorokin (1947, p.523) suggests that "an organization emerges as a separate and recognizable collective unity and begins to function as an individuality among thousands of other organizations and institutions".

Sorokin appears to come close to suggesting a form of animism that ascribes some form of consciousness to a community and its institutions. A similar concept was termed the 'group mind' and was usually applied in studies of crowd behaviour. Markova (1982) supported the earlier idea of a 'group mind' in communities and Reicher (1989) developed an argument for community members adopting a common social identity that provides a model for stereotypical norms of behaviour. As a collective, shared

thinking within a community Reicher's model does seem to apply to herbalists in the community of herbalists. The organisation of the community is embodied in its institutions; it is the site where all members are connected, the site where the community displays its presence within a wider society, and the site that reflects the identity of the community. This is an identity that is perceived by society and may be amended or altered by society's perceptions and/or any act attributed to the community that might engender such an alteration of perception.

The idea that communities and their institutions can have an identity is supported by Giddens (1988, pp.109-139) who considered the work of Goffman (1959). Giddens suggests that whilst Goffman appeared to be interested only in groups and communities as interactive encounters of individuals, Goffman's notions of 'role' and 'social identity' could be applied to groups and communities. Social identity is 'the face' of medical herbalism within society and can be changed to offer a different presentation within a society subject to change or changed to offer an altogether different 'face' to society. (This is reminiscent of 'brand names' and 'product identity' in commercial undertakings.) A social identity is plastic — it varies with social situations to produce an interaction with an audience who can form a perception of that identity. By re-presenting medical herbalism as 'more scientific' the institutions of herbalists offers an identity that might be more readily encompassed within the heterogeneity of society — that is, more readily acceptable to the institutions of orthodox medicine and to policy-makers. Fitzgerald (1974, p.3) states that "social identities are situational . . . cultural identity transcends situational adjustments in the social world". This may account for

the idiosyncratic practise of herbalists and their responses that do not strictly accord with the 'science' of phytotherapy as represented by the institutions of herbalism.

The long history of herbal medicine coupled to a tradition of practise that was not recognised as 'science', and the clinical experience gained through practise are factors in medical herbalists' 'way of life'. It affects their practise inasmuch as they seek to assist their patients as much as they can and therefore call upon any available knowledge or empirical evidence to guide them. One herbalist remarked, "Well it just seems the most natural thing for me to do, it's the way I work and hundreds of herbalists before me have worked this way". It is ever-present in themselves no matter what the social situation and is a meaningful part of their self-definition. As a stable part it is more fixed within the individual than a social identity. King (1974, p.107) suggests that "Through a distinctive mode of learned behaviour the individual is provided with a means of acquiring a concept of self . . . thus cultural identity is the self-identification made by the creators and inheritors of a given culture history" and LeVine (1982, p.86) identifies it as "the cultural expression of individual motive". The herbalists in this research were proud (not in any haughty sense) to be recognised as medical herbalists: it could be stated that their practise was their "idiom for the communication of identity" (Jacobson-Widding, 1983, p.15), for as Fortes stated "you only *know* who you are by being able to *show* who you are" (Fortes, 1983, p.395).

It is suggested that medical herbalists have a culture of practise that identifies them as medical herbalists and that this differs from some organised institutions of their community — notably the School of Phytotherapy and the British Herbal Medical

Association — that have a social identity representing the herbalists' community in contemporary 'scientific' terms. It would seem that herbalists continue in very much the same way of practise as historically described. Their study and training may now be within a more scientific framework and more and more herbalists make use of biochemical and pharmacological underwriting of their medicines, yet clinical experience and the history of empirical evidence still guides their practise. The organised institutions mentioned above relate to a wider society and would appear to have adopted a more 'scientific' role in order to portray a social identity that is more acceptable to governments and institutions of the dominant medical orthodoxy. This is a role that says "See, we're not that different to you and how you think" in the hope of recognition and welcome as legitimated members of the medical professional community.

Chapter 6 — The Sociopolitical Environment

The practise of herbal medicine does not just occur within a sociocultural environment of primary healthcare or just within an economic environment of the medical marketplace, it is also situated within a sociopolitical environment. A sociopolitical environment does not refer to the colour of politics in government — from the deep blue of fine Wedgwood china only available to the selected few to the rabid red of communal equality, or the 'new' imperial purple of messianic moderation and partnership in between. A sociopolitical environment is here taken to be the nexus between a political group mandated to govern a population, the social institutions assuming the role of expert in matters relating to the population, and the population itself which accepts the expertise claimed by professional institutions — the 'governmentality' of Foucault (1979). A brief sketch of some of the developments in the sociopolitical environment for medical herbalists is followed by an examination of herbalists' statements regarding possible futures for their practise. The reliance on British Common Law to continue practising and moves towards state recognition would appear to be replaced by a sense of uncertainty and fear of legal changes initiated by European Union directives.

Governmentality

Hughes remarked that professions "claim a legal, moral and intellectual mandate . . . collectively they presume to tell society what is good or right for the individual and for society at large in some aspect of life. Indeed, they set the very terms in which people

may think about this aspect of life." (Hughes, 1958, p.79) The increasing numbers of the population seeking alternative healthcare strategies seems to indicate a growing disregard for 'medical science' and/or a willingness to think about health and medicine in a different way. The sociopolitical environment for medical herbalists is one of uncertainty. Not only because the terms in which medicine is thought about are set by 'orthodox' medical professions who deem 'scientific' methods and explanations the sole route to healthcare of the population, but also because the government of the population is now complicated by membership of the European Union. Membership of the EU may influence the national government in its regulation of healthcare strategies. Many herbalists who responded to this research voiced concerns that the efforts of herbalists' institutions to accord with the perceived requirements for state registration as medical practitioners would be confounded by a process of European harmonisation in healthcare that would rely on a pan-European dominant paradigm of biomedical science. For as Krige & Pestre assert: "The sciences are also the most influential knowledge-system in our societies" (1997, p.xxiii)

In Britain, Europe, and most Western societies, this appears to be true and has been remarked by others. Smith (1996) considers that "In the current climate of public policy-making, the public, business, government, and scientists are being encouraged to meet in common management arenas to address and reach consensus on the optimum approach to issues of concern to society at large" (p.201). Ziman, (1995) agrees: "Public policies for research and development in basic science, and in a wide range of science-based technologies, are of perceptible weight in national and international politics. Technical experts with scientific qualifications have become major actors in

public affairs" (p.243). Both acknowledge the difficult position of science in these relationships as science can no longer be considered academically as a source of objective and unmediated knowledge. However, as has been noted, Ziman argues that science is still regarded by policy-makers as authoritative.

Earlier writers have considered the relationship between governments and groups or institutions that are involved in making and executing policies. Some have viewed the groups as 'pressure groups' intent on promoting their own economic advantages or autonomous power (e.g. Hall et al., 1975; Richardson & Jordan 1979; Cawson, 1982). The intervention by and influence of such groups in 'lobbying' governments has often been popularly viewed as interference in a democratically elected government or, conversely, as an extension of democracy by letting the government know what the population thinks. Foucault (1979) suggests a genesis for the relationship between governments and groups in the relationship between a monarch and the advisers to the monarch. As sovereignty and governing power became embedded in collective bodies, rather than one individual, the execution of government relied on advice and guidance from the acknowledged experts and institutions relevant to particular policies. Advances in understanding and knowledge of the natural world were made and transmitted by learned individuals who became acknowledged as experts. Governments sought advice from these experts who, in turn, sought recognition for their status by seeking self-regulation and governmental acknowledgement as experts in their field. In this way a demarcated group of people with advanced knowledge and expertise, not common in the population, became professionals. Associations of professionals have become the institutions that governments approach for advice, and approval, on

government decisions and that governments utilise as executors of policy details. This would appear to be less of a coercive relationship as understood by 'pressure group lobbying' and more of a relationship of mutual convenience.

Relating to this research, the government relies on such institutions as the BMA and the RCP, and medical academics, to advise them on healthcare policy, to execute healthcare policy, and to underwrite — as socially accepted experts — healthcare policy. It should be noted that this is not a 'one-way' process, for the medical institutions are highly influential in the basic understanding of healthcare that governments use to formulate healthcare policies and influential in the process of policy formation. Governmentality is more than the relationship between government and institutions, it is a governing process. Foucault states (p.19) that it is a strategy of governing a population indirectly through the disciplinary effect of social institutions normalising behaviour and discourse within the population. Governments rely on professional institutions as mediating agents in the governing of a population: the surveillance and disciplining functions implicit in a population's regard for professional institutions ensures quiescence of the population. Higgs (1998), Hughes & Griffiths (1998), Hollinshead (1999), and Durrheim & Foster (1999) have considered this aspect of governmentality and suggest that it also engenders a sense of citizenship and local power. Herbalists appear to interpret any sense of patient power as the ability of patients to seek healthcare beyond the sanctioned practices of biomedicine; "Patients should have the freedom to choose", and "If they don't want the drugs a GP gives them, they ought to be able to go elsewhere". One result of local power and the citizen's freedom of choice is that it denies — or at least complicates — the surveillance of

patients by bureaucratic record-keeping: government figures for epidemiology, the drugs bill, and patterns of a populations use of healthcare are no longer readily discernible from doctors' records only. Sharma (1994) suggests that patients of CAM practitioners are beyond a Foucauldian surveillance function of orthodox biomedicine; official records usually refer to CAM in the context of its cost as an adjunct to the cost of orthodox healthcare. In the sociopolitical environment it illustrates one of the differences between the legitimacy, and involvement of biomedical practitioners in a governing process, and the non-legitimate 'outsiders' of CAM. The acceptance of medical herbalism by orthodox practitioners and their institutions seems to be gradually increasing within the past few years — and through them the government — but a wariness and an amount of animosity remains from earlier interprofessional endeavours.

Herbalism in Professional Politics

Advocates of herbal medicine have had a varying relationship with the medical profession and the policies adopted by governments to control and deliver healthcare. A significant date is 1649 when Culpeper published his *Physicall Directory* which was a translation from Latin to contemporary English of the *London Pharmacopaeia* (a listing of medicines produced for the medical professions under the direction of the College of Physicians). However it was not just a translation of the *Pharmacopaeia* as an index of medicines. Culpeper advocated the use of cheap and readily-available herbs and added notes of guidance and instruction for the use and application of medicines. Such a 'self-

help' manual written by an Apothecary who used Astrology for divination and diagnosis, and furthermore a volume that made 'professional' knowledge readily available to those unskilled in Latin, displeased many physicians. The significance of Culpeper's work is as text that extended the accessibility of recorded knowledge by being written in English. This made knowledge of some medicines available to an audience that had been previously limited to professional physicians. Of further significance is its illustration of the perceived division between the enclosed profession of medicine, with its authority derived from exclusive control of specialised knowledge, and the practice of 'folk' medicine based on experiential knowledge. In this sense it must have reminded the College of Physicians of the 1548 Act signed by Henry VIII that allowed anyone professing the relevant knowledge to practice herbal healing. This Act, sometimes referred to as the 'Quack's Charter', was passed to stop harassment and legal prosecution of non-physicians who treated the sick by the College of Physicians.

Arguments to support the knowledge and practice of medicine as a profession, in distinction to a more informal and local application of 'folk medicine', were reinforced by the growth of scientific knowledge. Orthodox medicine, adhering to scientific principles that objectified sickness, became even more of a science during the 17th century when scientific reason and logic expanded the understanding of the natural sciences. Herbs had been (and still were) the basis for most medicines; the cultivation and preparation of herbs had been an adjunct of medical practice, but the specific study of plants made botany a science in its own right. In this way herbal medicine departed even more from science with botany being accorded a growing superior status as a science studied in universities[1] . Herbalism as a practice retained a more holistic view

of illness that often included elements of magic, spiritualism, or the occult and seemed to have little scientific basis. Scientific reason prevailed, industrialisation and urbanisation made naturally occurring herbs less available to most of the population, and as a consequence it would seem that the practise of herbal medicine declined.

However, herbalism was revived in the nineteenth century by the concept of 'medical botany' which suggested that illness was due to anomalies in the "flow of bodily heat" (Miley & Pickstone, 1988, p.140) and could be cured by baths and herbal medicines. An American, Albert Coffin, popularised the system among the poorer population of industrial northern cities like Manchester and Leeds where he established local societies to study and practise the system. The medical profession viewed Coffin and his work as "evil quackery ... whilst honest surgeons trudge on as they can" (Lancet, 1847). Coffin was critical of orthodox medicine and incited people to "throw off the yoke of medical despotism" (Coffin, 1864, p.xviii). The Medical Act of 1858 had excluded herbal medical practitioners from registration as approved medical practitioners and herbalists recognised the need for a unifying agency. The National Association of Medical Herbalists was eventually formed in 1864 to safeguard member's interests and to promote herbal practitioners as medical professionals. Brown (1985) and Griggs (1997) have described the problems and fluctuating fortunes of herbalists seeking acceptance and state recognition during the years following the 1858 Act. For example, an Amendment to the Medical Act — proposed in 1886 — threatened to deny the Common Law that enabled non-registered healers to practise as long as they did not claim to be doctors or physicians: however, this Amendment was not accepted. NAMH's efforts in the 1890s to get governmental acceptance of a Charter for

registration of herbalists as medical practitioners was opposed by the medical professionals and was not achieved. Further efforts at acceptance for registration were made during the 1920s and 1930s with the same outcomes, but it was the Pharmacy and Medicines Act of 1941 which effectively made medical herbalism illegal. Herbalists could still practise to diagnose, give advice, and prescribe herbal medicines but could no longer dispense herbal medicines. Many herbalists did continue in such an illegal manner ("keeping a low profile" [Griggs, 1997, p.301]) until the 1968 Medicines Act rectified the situation.

The fact that many herbalists practised illegally until 1968, coupled to herbalists' professed ideas of 'balancing forces' in an art of natural healing, may have influenced the orthodox medical professions in their perception of CAM as 'fringe medicine', 'quackery', and 'charlatanism'. The BMA Report of 1986 illustrates the prevailing view held by the medical profession that outdated and outmoded forms of medicine had no place in modern healthcare. As an institution of orthodox medical professionals the BMA's declamation of alternative medicine's estrangement from medical science was probably influential in shaping the healthcare considered by the government.

The BMA Report of 1993 reflected a changed attitude amongst orthodox medical professionals. It would appear that the increasing acceptance of CAM by the population necessitated a perhaps grudging acceptance of a realised social reality. Perhaps anxious not to appear hubristic and dogmatic the report accepted the possibility of some CAM therapies becoming limited complements to the practise of medical science. The BMA would, however, maintain ultimate control and responsibility for patient care and

control any adjunctive therapies used in patient care. In this suggested model herbalists, for example, would become practitioners complementary to and subaltern to the doctors and physicians of medical science. Tovey (1997b) showed that this was unacceptable to many CAM practitioners. For herbalists this must have reminded them of their previous refusal, in 1948, to subordinate themselves to orthodox medical practitioners in order to be accepted within the newly established National Health Service.

Tovey's work was criticised earlier (see Chapter 2) for reporting what CAM practitioners thought orthodox practitioners thought of CAM practitioners: Tovey seemed to translate this into what orthodox practitioners actually thought. However, there is validity in the form of question used as it indicates CAM practitioners' perception of their identity as perceived by orthodox practitioners. In this research medical herbalists were asked how they thought healthcare institutions — Department of Health, British Medical Association, and Royal College of Physicians — related the professional status of medical herbalists in comparison to Consultants, GPs, Homeopaths, Nurses, Opticians, Pharmacists, and Physiotherapists. Also, they were asked if they thought that such a comparative professional status had improved in the previous five years.

Many respondents (38 from 87) thought that all the listed healthcare professionals had a higher professional status than medical herbalists in the eyes of healthcare institutions. One herbalist thought "we are invisible", whilst another stated that "the cleaner has higher professional status". Most respondents were less acerbic in their comments but an impression of resignation to low professional status could be gathered from the

responses. A few respondents marked Nurses and Physiotherapists as having less professional status (counts of 11 and 2 respectively), whilst the same professions were marked as having the same professional status as medical herbalists (counts of 8 and 1 respectively). There were 44 responses that marked homeopaths as also having the same professional status. It would appear that many herbalists thus identify themselves as on a par with homeopaths in relation to how they think their professional status is viewed by orthodox medical institutions; however, in interviews, many herbalists viewed homeopaths as having a low status in the eyes of doctors. It could be assumed from all these responses that the majority of medical herbalists consider their professional status to be unworthy of acknowledgement by those institutions.

However, when asked if their comparative professional status had improved in the previous 5 years only 18 respondents answered 'NO'. Of the remaining 69 respondents many indicated possible reasons for such an improvement or commented that the improvement was "not really significant", or that it was "slight, we're still viewed with suspicion", or that herbalists were "still considered to be the lowest form of life by 90% of GPs". Several considered that as their training was now commensurate with a BSc degree this had had an effect on their professional status. Some herbalists consider that there appears to be a "growing awareness of the standards of education and the levels of research". Many considered that any improvement in their perceived professional status was influenced by "media coverage and patients' reports". Similarly, although any improvement was "gradual and piecemeal" it was "based on patients' reports and published clinical trials". Patient reports and published trial results might also influence GPs who are now "more aware of what we can do for some patients" (several

respondents also mentioned cost effectiveness for GPs and relieving GPs of chronic patients). Several respondents remarked on an increase in the amount of contacts with doctors who may be "usually more positive now" and that there seems to be "more acceptance in the newly qualified". One herbalist suggested that the slight improvement could be because "other medical professionals, like nurses and doctors, are coming into our profession". Many were concerned that their profession was not perceived by orthodox medical professionals as more than a 'semi-profession' or even worthy of recognition as a medical profession — "the old guard tend to shake their heads" and "many dismiss us out of hand". Some herbalists thought that opportunities for postgraduate study in herbal medicine could promote a perception of their practise as the application of highly specialised knowledge whilst many expressed the possibility of legislation improving the location of their profession as a medical practise. Most herbalists have recognised an improved perception of their professional status and account for it by an increasing awareness of how they are trained and, more importantly, what they do for patients.

A few recent studies have been published that report on doctors views regarding the use of CAM.Unfortunately nearly all studies approach doctors for their views on CAM as a whole and rarely distinguish between particular therapies. Doctors as individuals surely must have personal beliefs, personal experiences, and personal pre-existing views that affect their perceptions of CAM. It could be argued that acceptance of a CAM therapy is contingent on its perceived position in a spectrum of the demonstrably proven, the believable, and the nonsensical — a form of "contingent legitimacy" (Tovey, 1997a). For example, one doctor may accept homeopathy as substantially proven and reject

herbalism as dangerous 'old wives' tales', even though both therapies have basic philosophies of action contrary to the doctor's training in biomedical science. To agglomerate the seemingly irrational therapies using crystals, the 'learn-in-a-weekend' therapies, the centuries-old tradition of herbal medicine, and the NHS acceptable homeopathy or acupuncture seems less than fair to each therapy and less than illuminating in attempts to chart and understand CAM's — indeed, each therapy's — relationship to the prevailing orthodoxy of medicine. It would appear that much previous research has failed in this respect. CAM as a phenomenon deserves to be researched and analysed to increase our overall understanding of healthcare, but surely each therapeutic strategy also deserves research to increase our understanding of that particular strategy. The how?, why?, where?, when? of each strategy appears to be idiosyncratic of that strategy. There are some similarities in some strategies, but the only uniting feature is that all are — to a greater or lesser extent — not readily understood or accepted by the dominant institutions of biomedicine and therefore unorthodox.

One of the few studies that does list doctors' acceptance of individual CAM therapies was Astin et al. (1998) which found only 13% of physicians in the USA accepted herbal medicine as having any value. It should be noted that the USA has a medical marketplace that appears to be more liberal than Britain's and various forms of herbal medicine (oriental and occidental) appear to be more prominent and accepted in the USA. Doctors in Britain would appear to be more conservative in accepting any CAM therapy despite a growing number of them referring patients to a CAM practitioner. Thomas et al. (2001) sampled 1226 GPs in England and had 964 replies to a postal

questionnaire asking for details of access to CAM for their patients. If all non-respondents gave no access to CAM the lowest rate would be 30.3% of practices giving access to CAM. Acupuncture and homeopathy were the most commonly available and the authors conclude that a limited range of CAM was acceptable to a large proportion of GPs. In a similar study Perry & Dowrick (2000) sampled all GPs in Liverpool and found similar rates of referral and endorsement of CAM therapies. Acupuncture, osteopathy, and chiropractic were the most highly regarded, whilst homeopathy and hypnotherapy had various levels of endorsement. Medical herbalism, aromatherapy, and reflexology were the least acceptable CAM therapies. Luff & Thomas (2000) studied 10 schemes of primary healthcare in which CAM was included and found that the GPs and CAM practitioners involved considered it to be beneficial. Problems in continuing such schemes were identified as economic, the need for research into their effectiveness, and how accessible CAM was in such schemes. These schemes, and others where primary healthcare is offered through a variety of integrated therapies, depend on the shared aims of CAM practitioners and orthodox practitioners for the continuance and success of the schemes. Given the picture of few orthodox practitioners sanctioning medical herbalism, professional politics may make it extremely difficult for herbalism to be integrated in general practices of primary healthcare.

Professional politics may have damaged some integrated schemes where the initial shared aims have been contaminated by perceptions of relative status and authority. There is some anecdotal evidence that suggests the near collapse of one scheme and the total failure of another scheme because the doctors and CAM practitioners involved

became concerned with relative professional status and the control of therapies available to patients. The subaltern and adjunctive nature of CAM practice may have been too strongly emphasised or too sensitively perceived (as anecdotage it is impossible to comment on). The difficulties with such schemes may partly have been due to cost-effectiveness issues. One GP (independent of any integrated scheme) who was also a medical herbalist suggested that the time allowed for consultations, and the costs reimbursable from the NHS, made it very difficult for him to fully integrate a practice of biomedicine and a practice of medical herbalism. As an independent practitioner he was not conscious of any disparaging remarks or comments by fellow doctors referring to medical herbalism; although he did suspect that as a GP there may have been an element of "professional brotherhood". In his contacts with other doctors and consultants he considered that he was regarded as a doctor and that any other beliefs were regarded as private to him and irrelevant to discussions of patients' care. Although there is an increasing number of doctors (especially, it seems, more recently qualified doctors) who accept — to a limited degree — CAM as a component of healthcare, herbalism still seems to be one therapy that many doctors doubt as effective or relevant.

Herbalism in State Politics

Doctors, and their institutional representatives, have an influence in healthcare policies and a strong influence in decisions regarding what counts in healthcare. They accept, or reject, technologies, developments, and philosophies that they perceive as contributing

to, or useless for, healthcare. What was once regarded as without substantive evidence of rationale or effectiveness — and thereby reported negatively to governments to prevent state sanctioning — can become accepted for state sanctioning (e.g. psychiatry, osteopathy, chiropractic, and medical homeopathy). Recent British governments have been aware of the population's increasing use of CAM and have sought advice and information from their usual sources — the institutional representatives of medical professions — and, through the DoH, academic research. The House of Lords Select Committee on Science and Technology was ordered to report to Parliament on CAM and published their report in November 2000. This comprehensive report illustrates governmentality in practise — the mandated governing body seeking information and advice from institutions that informs considerations of policy affecting the population. The report states that it was initiated because of the "high level of public interest" in CAM (par. 1.30). It also reports 1999 estimates of over-the-counter sales of CAM medications of £93m (and increasing) and an estimate of providing CAM through the NHS for the same year of £450m. These are substantial amounts that illustrate the popularity of CAM — and the drain on the NHS budget for something that many professionals in healthcare find dubious at best and downright dangerous at worst. The Select Committee proposed to ask several questions (par. 1.30) that may be summarised as follows.

> Are current regulations regarding CAM adequate to provide safe healthcare?
> Does current medical training need additions to familiarise doctors with CAM?
> What are the levels of CAM training?
> Is there enough research being done by or on behalf of CAM?
> Should the NHS provide more CAM? If so, how should it be delivered?

The report recognised the problems in attempting to consider CAM as a heterogeneous entity and in forming some differentiation between therapies the report classified CAM

therapies into 3 main categories (par. 2.1). The Group 1 therapies they considered as professionally organised were acupuncture, chiropractic, herbal medicine, homeopathy, and osteopathy. Group 2 therapies were complementary to conventional medicine and included aromatherapy, hypnotherapy, and reflexology. Group 3 was subdivided into 3a for traditional therapies such as Ayurvedic medicine and Traditional Chinese Medicine, and 3b for others that "lack any credible evidence" (ibid.) such as crystal therapy, iridology and kinesiology. Whilst the report notes evidence of "a non-pragmatic, deep-seated prejudice held by some members of the conventional scientific establishment against the entire CAM field and its philosophy" (par. 2.21), it suggests that "extreme attitudes do seem to be changing". From the published studies and herbalists' responses to this research it seems true that extreme attitudes are changing, however the majority of orthodox practitioners do still view medical herbalism with some disdain. Similar attitudes of hostility towards CAM by orthodox practitioners were reported to the Select Committee (par. 2.19). The dogmatic retention of biomedical science as a sure foundation was voiced to the Select Committee by Professor Wolpert of the Academy of Medical Sciences; "Medicine aims to base itself upon science. I am sorry that any complementary or alternative medicine procedure for which one can see no reasonable scientific basis should be supported" (par. 2.17).

The report considers that for some therapies in Groups 2 & 3 a single voluntary regulatory body for each therapy might reduce any risk of harm to the public by poor practice. This would also indicate a further stage of development towards possible statutory regulation. Herbal medicine was already at this stage and the report supported herbalists' plans for statutory regulation. Herbalists would appear to be acceptable now

but there are some uncertainties. The product of statutory regulation through the 1999 Health Act is unclear (para. 5.43) and requires a single representative body to apply by an Order in Privy Council or to the newly-formed Health Professions Council. The Select Committee supported statutory regulation for medical herbalism after consideration of evidence reported to the committee. The majority of the evidence quoted in the report appears to come from representatives of the European Herbal Practitioners Association and the European Scientific Cooperative on Phytotherapy. The EHPA, and its sister body the British Herbal Practitioners Association especially, seems to be the leading voice in discussions regarding state recognition whilst ESCOP appears to be more engaged with aims and objectives within a European sphere.

Some of the criteria suggested for successful applications for state recognition (para. 5.49) includes four questions that could preclude any application by the BHPA. Firstly, "Does the group naturally fall within the family of health professions and conventional medicine?" — if medical herbalism was perceived as conventional medicine it would have been recognised in its earlier attempts at registration and would not be subject to denigration by the majority of conventional medical professions. Secondly two questions that refer to a "single, defined professional voice" and a "common education system at an appropriate level". The answer to these questions is linked in that the BHPA includes the International Register of Consultant Herbalists whose training and education differ from that accepted by the National Institute of Medical Herbalists for registration as a qualified medical herbalist. It could be argued, from the membership numbers alone, that NIMH represents the vast majority of medical herbalists much more than any other body of herbalists. The final question that could raise difficulties in

the process of state recognition is the question of supplementarity to existing medical professions to prevent a new group from "significantly impinge[ing] upon a group or groups being regulated under other Acts". Herbalists have already declined state recognition as supplementary to doctors (see above) and many herbalists view their practise as a complete system of diagnosis, prescription, and management of a patient's health. To be supplementary to a doctor who refers a patient with a diagnosis (which is often non-negotiable or closed to discussion) and who retains the overall management of a patient is not acceptable to many herbalists. Medical herbalists seek to identify any underlying cause of the patient's problem as manifested by the patient's symptoms and then treat that underlying problem rather than the symptoms. They use herbal remedies to assist the 'balance' of the body and restore the body's own healing processes. One herbalist suggested that practising as a complement to orthodox doctors could result in herbalists being used as "a dumping ground for all the chronic patients without being able to suggest why the patient has chronic symptoms which denies much of my training and knowledge".

The Select Committee note in their report that current training for medical professionals does not generally have any elements in the curriculum to familiarise students with CAM. There are exceptions and the report recommends that each and every profession's regulatory body develops guidelines for training to include some form of familiarisation with CAM and its relation to that profession's practice. This recommendation leaves it open for regulatory bodies to familiarise students in the same way that current exceptions in professional training refer to CAM either very briefly or refer to CAM as instances of poor practise and possible risks to patient health. Any

sense of openness to unorthodox medical views and possible integration is left to the judgement of regulatory bodies who already seem to dismiss CAM as irrelevant. It might be that for herbalists the current training of doctors would be of most concern and, although there seems to be an increasing number of medical students who would welcome some familiarisation, some medical schools would appear to retain a culture of progressive biomedical science superseding 'folklore', 'tradition', and 'unscientific medicine'.

The report decries the variation in CAM training and recommends standardisation of content, validation, and accreditation for each therapy (para. 6.33). Training for most medical herbalists is over a period of 4 years full-time and is validated as a BSc through the University of Wales or the university that offers a BSc course in Herbal Medicine — i.e. University of Westminster, University of Central Lancashire, and Middlesex University. It is accredited by the NIMH who set a core curriculum that includes anatomy, physiology, pathology, pharmacology, botany, materia medica, diagnosis, and herbal therapeutics. Also included are communication skills, critical skills, research methodology, and supervised clinical practice. However there is some variation in herbalists' training as a Diploma in Botano-Therapy may be gained through the ICRCH without the level of scientific study in the School of Phytotherapy's course — hence its unacceptability to the NIMH (see above). The NIMH is currently developing a post-graduate development scheme and the Scottish School of Herbal Medicine has recently devised an MSc Research programme validated by the University of Wales.

Compared to other areas of research in healthcare there is very little research into CAM. The report suggests five reasons why this may be (para. 7.3); no research infrastructure, lack of research training, lack of funding, lack of interest by conventional scientists outside a CAM therapy, and the view that conventional research methods are inappropriate to some therapies. It is recommended that research should be undertaken with three points in mind (para. 7.7). Is the therapy more effective than a placebo?, Is it safe?, And how does it compare to other therapies in terms of medical outcome and cost-effectiveness? The report states that Randomised Control Trials are the preferred methodology as it is accepted as a definitive standard. However, the report recognises that many CAM therapies do not accept such a research methodology or find it exceedingly difficult to apply in the course of their therapeutic practice. Some CAM therapies are based on alternative philosophies or understand therapeutic actions within a different theoretical framework to conventional biomedical science. Many CAM therapies utilise a different diagnostic system that is individualistic to the particular patient and considers the patient as a person with relationships and environments beyond the initial display of symptoms. This is complicated further by the possibility of each patient having individual responses to the same treatment. Another problem with RCTs for CAM is that nearly all CAM therapies accept that the patient/practitioner relationship is part of the whole therapeutic strategy. Many conventional doctors would agree with this final point and consider it part of good practise. The main argument for RCTs would appear to be an objectivity in its reasoning because extraneous and non-measurable variables are supposedly excluded. To design a RCT that successfully excluded the patient-practitioner relationship could not be a valid trial of the therapy.

Many herbalists seem to argue strongly against the applicability of RCTs to herbal medicines whilst other herbalists consider RCTs (with various adjustments to the standard methodology) could be useful in establishing evidence for herbalism's credibility. The Select Committee acknowledges the problems of RCTs and heard arguments that other methodologies could be applicable but still recommends that each CAM therapy produce an evidence base "with the same rigour as is required of conventional medicine" (para. 7.26). The rigour required of conventional medicine is dictated by the paradigms of reductionist science which does not accept the metaphysical or the anti-Cartesian view of the interconnectedness of mind and body.

The Select Committee's recommendations for the delivery of CAM support the current arrangements whereby NHS funded CAM is only accessible through referral from a doctor (para. 9.37). They also recommend that doctors should limit referrals only to those CAM therapies which are statutory regulated or those considered to have a robust system of self-regulation (para. 9.46). The report also suggests that CAM practitioners who practise privately (as nearly all CAM practitioners do) "should work towards integration between CAM and conventional medicine" (para. 9.20). The emphasis seems to be on CAM practitioners integrating into conventional medicine rather than conventional medicine accepting CAM within healthcare to form integrated healthcare, or a joint and equal partnership to formulate and execute integrated healthcare. The responses from herbalists for this research show that many herbalists have between 1% and 5% of their patients referred to them by doctors. Nearly all such referrals are "fat wallet cases"; that is, patients who have presented a problem for a long-term and doctors have been unable to satisfactorily treat them. Often the information supplied to

the herbalist by the doctor is less than comprehensive so the herbalist "has to go through it all again with the poor patient". Several herbalists commented that they felt utilised by doctors as the "last resort for difficult patients and chronic sufferers". Medical herbalism appears to be less acceptable to doctors as a therapy than acupuncture, for example, so any form of integration would appear to be subject to difficulties. Several herbalists do have regular contact with GPs as practitioners attached to a surgery and none reported dismissive or dogmatic attitudes expressed by the GPs; however most of them commented on "I only get the chronic ones", or "he can send them to me because he's done all he can", and "it shows the patient that the doctor's still trying to do something". It remains to be seen whether the 'gatekeeper' role of doctors in accessing CAM through the NHS, the CAM practitioner's role as depository for chronic patients, and the possibility of integration would be affected by state regulation of medical herbalists.

In many ways the Select Committee's report reiterates the BMA report of 1993 which appeared to accept some CAM as complementary to conventional medicine. To be acceptable the CAM therapy would have to be able to show evidence of efficacy and agreement with scientific concepts for explanations of how the therapy worked. The doctors would still maintain overall control of treatment and any CAM practitioner would be subordinate to them. Foucault's idea of governmentality is useful in understanding how the BMA report suggested advice to the government and how very similar advice is offered to the government by the House of Lords Select Committee. A professional institution, socially respected and ascribed as experts on healthcare, sets the terms in which this aspect of healthcare is framed; then a parliamentary institution,

respected by governments as gatherers of information and formulators of advice, provides detailed guidelines that could directly influence policy. The next stage is the government's policy proposals to be discussed and refined by academics and professionals prior to the actual execution of policy by healthcare professionals. In this way the ungoverned portion of the population — those who use CAM — become subject to healthcare policy and governable.

Medical herbalists who responded to a question of state registration seemed to consider state registration as incidental to their professional practise. Many commented that state registration would "improve the standing of herbalists" and "recognise us as professionals" or "it would make our profession safe", but the majority of respondents (47) did not think that state registration would affect their practise. 16 respondents commented that they already maintain a good professional standard and that the existing self-regulation was adequate for professional practise, but one herbalist added that "We can never afford to be complacent". 2 respondents were not particularly enthusiastic about state registration with a possibility that it would mean "Many unnecessary and restrictive limitations" or that they would "resent being told how to run my practice". The independence voiced by these two herbalists could stem from their long years as seldom-acknowledged professionals in independent practice (20 years and 18 years respectively). Considerations of state registration do not seem to affect how medical herbalists practise apart from a tendency to be vigilant in self-regulation at practice level; they appear to be primarily concerned with being able to practise for their patients.

In this respect many herbalists commented upon and voiced concerns over possible future legislation and regulation of the practise of medical herbalism and the classificatory status of herbal medicines. The EU appears to be quite concerned at the availability and sale of 'over-the-counter' medicines (OTCs) and the present lack of regulation regarding the establishment of standards in quality, dosage, purity, and accuracy of descriptions and claims to efficacy of such OTCs. Some herbalists expressed worries that any measures to control and regulate OTCs could affect the availability of some herbal medicines. Herbalists' anxiety and concern appears to be specifically related to EU legislation and the sociopolitical environment of Britain's membership in a collective endeavour of harmonisation.

Fears and Anxieties

Herbal practitioners are aware of their position as professionals without legitimation as state-registered medical practitioners and view the programme of European Union harmonisation as a possible curtailment of their continued practise. Many consider Britain's membership of the European Union as a powerful structural factor in the promotion of phytotherapy as a representation of herbal medicine within an orthodox scientific framework. Most forms of modern medicine are understood in a context of science that seems to be acknowledged as a superior way of understanding health, illness, and medicine. Compared to empirical and historical ways of understanding health, illness, and medicine, scientific medicine has been generally considered in Western societies to be objective and progressively effective. Consequently any form of medicine and healing, to be accepted as a legitimate practice in a Western society, has

to be presented in those scientific terms if it is to be acceptable to governmental and institutional authorities. The EU member states have differing forms of institutions and mechanisms for governing and executing policies: to harmonise healthcare in the EU requires a commonly agreed basis for policy design. The commonly agreed basis is that of biomedical science which is itself translated by each member state to accommodate the desired healthcare policy. For example, medical herbalism is illegal in Italy and Spain whilst Germany has a long history of integrating forms of naturopathic medicine, herbal medicine, and conventional biomedicine; however in Germany the dominant paradigm is conventional biomedicine with naturopathic and herbal medicines being "mainly applied in an orthodox context" and "forced to fit into parameters imposed by orthodox science" (Whitelegg, 1994, p.238).

The sciences of biomedicine have guided the EU in its many directives relating to healthcare. For herbalists the directives and regulations stemming from the EU that cause most anxiety are those directives and regulations that affect the availability of herbal medicines. 35 respondents to this research commented on the herbs already made unavailable through EU directives and the concern that many more herbs could be lost through further directives. The loss of *Symphytum officinale* (Comfrey) is illustrative of the grounds for such concern. Whitelegg (1996) describes how faulty science and false scholarship led to Comfrey being considered unsafe for internal use and subsequently made illegal and therefore unavailable to herbalists except as the much milder acting form of Comfrey leaf tea.. The European Medicines Evaluation Agency relies on scientific advice in relation to all medicines in the EU. Such a large task of evaluating medicines with advice and input from doctors, pharmacists,

pharmacologists, pharmaceutical companies, and scientists may require an unquestioning reliance on recommendations from accepted authorities. Several herbalists commented on their concern that commercial interests and pharmaceutical industries could adversely affect EU decisions regarding herbal medicines, or that herbal medicines would have to be defined in orthodox scientific terms as collections of measurable active ingredients. Possible EU regulations relating to the practise of medical herbalism were also a cause for much concern and anxieties. 23 respondents referred to possible loss of Common Law practise rights and/or any loss of prescribing and dispensing rights unless qualified as a conventional medical practitioner. However 2 respondents did comment that EU regulations could ensure that all herbal practitioners were adequately trained, qualified, and competent to practise. A small number of herbalists (4) were concerned about "more red tape and bureaucracy" and 6 respondents intimated a vague perception that EU regulations "would probably make it worse".

The fears and anxieties expressed by herbalists may arise from a sense of uncertainty, but could also arise from previous experience of EU regulation. The European Directive 65/65EEC was set to be effective from 1 January 1995 and required all medicinal products to be licensed; the Directive defined medicinal products as "any substance or combination of substances, presented for treating or preventing disease in human beings or animals". The strict letter of this directive is such that a glass of water given to rehydrate a sufferer of acute diarrhoea would need to be licensed. Griggs (1997, pp.308-311) describes how Vic Perfitt (then Chairman of the British Herbal Medicine Association) met with other representatives of practitioner institutions prior to an

abortive meeting with the Medicines Control Agency. A campaign of press releases roused public support that was influential in the government issuing a press release on 11 November 1994 that interpreted the Directive as only applying to industrially produced medicines. The EU proposed regulations that all medicines should be pharmacologically defined and described which would entail, for those medicines not already listed in a pharmacoepia, lengthy tests, assays, and biochemical analyses to support a 24 page application for approval. This was of great concern to producers of herbal medicines in terms of cost; pharmaceutical companies have the infrastructure to complete the required assays and analyses and can incorporate developmental costs in production costs, whilst producers of herbal medicine would find it impossible. However, recently the Pharmaceutical Committee of the European Commission is considering proposals from the Medicines Control Agency to allow the licensing of herbal medicines that have evidence of traditional use. It is also hoped that evidence of traditional use could be applied to a limited range of OTCs, but the uncertain status and position of herbal medicines remains to be resolved, and until that time the future of medical herbalism as a professional practise cannot be predicted.

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[1] The Royal Botanic Gardens at Edinburgh publish a visitors handbook that describes the history of the Gardens from a doctor's herbarium to botanical gardens associated with the University of Edinburgh in the 18th. century. Shteir (1997) illustrates how botany as a science — with other sciences such as geology — became more restricted to academic research, and therefore inherently gendered, in the early 19th. century.

Chapter 7 — Conclusion

This research, and especially the responses from herbalists, has enabled me to fulfil my two original aims for this research. First, I have been able to record the recent history of medical herbalism and gain a knowledge of herbalists' views. Second, I have also been able to combine considerations of a knowledge system with considerations of a process of professionalisation. The results of the research confirm the concept of phytotherapy as a 'scientific' form of herbalism and show that it does not presently affect the actual practise of medical herbalism. Scientific methods and language have been utilised by herbal institutions to re-present medical herbalism as having an affinity with orthodox science, and this has resulted in herbal knowledge being re-formulated as the knowledge of using herbs in healthcare within a scientific understanding. The motivation for such a re-presentation and re-formulation appears to have been initiated several years ago by institutional leaders who were aware of the need to update and improve the level of herbal training in order to improve medical herbalism's professional location within British Society. This movement has gathered momentum to contemporary times when some herbal institutions like the British Herbal Medicine Association, the College of Practitioners of Phytotherapy, and the European Scientific Cooperative on Phytotherapy aim to promote the 'science of phytotherapy'. These are the recognisable institutions that welcome phytotherapy as an understanding of herbal medicine. Phytotherapy, and all its connotations and associations with science, has been promoted to gain acceptance within a sociopolitical environment.

Phytotherapy as a knowledge system appears to differ from 'traditional' herbalism in the following ways.

Phytotherapy	'Tradition'
systematic, logical, reductionist reasoning and scientific method	empirical and clinical reports of a 'healing force' and 'balancing' the body
plant ingredients as active agents in changing physiology to alleviate symptoms	synergy of plant parts in rebalancing the body to complete health — from the underlying cause to the symptoms
modern and contemporary	ancient
associated with medical science	associated with folklore

Phytotherapy is constructed to show a closeness to orthodox science and distance from folklore and 'old wives' tales': herbal medicines have been analysed and quantified to accord with scientific descriptions of biochemicals. This imposes an order commensurate with orthodox science and when such descriptions use the rhetorical language and form of presentation found in inscriptions of orthodox science they become more readily understood and accepted by orthodox science. Despite orthodox science itself being subject to construction, error, and dogmatism, it is autonomous, deciding on the relative validity of knowledge and forming a hierarchy of knowledge. Orthodox science dismisses and rejects knowledge that does not appear to accord with its reductionist principles. By constructing an identity of scientific knowledge the proponents of phytotherapy seek the acceptance of phytotherapy by the orthodox biomedical community. This illustrates Dolby's proposed model for the unorthodox re-presenting itself to become accepted as orthodox.

Understanding herbal medicine through a framework of science and calling it 'phytotherapy' has not affected the actual practise of medical herbalism. Practitioners continue to practise in very much the same way as practitioners have traditionally done.

It is still the underlying cause of a patient's problem that is sought and treated by medicines composed of plant parts. It is still a holistic practice that seeks to use herbs to 'balance' the body and aid self-healing. Not every herbalist welcomes the emphasis on a scientific understanding of medical herbalism. Many accept scientifically derived evidence for the composition and/or efficacy of herbal medicines yet retain a distinction from conventional medicine's rigid adherence to orthodox science and its rejection of the scientifically unproven. Others appear to discount any scientific explanations and prefer to base their understanding of herbal medicine on centuries of empirical and clinical evidence. Whilst there are differences of opinion amongst herbalists regarding phytotherapy as a 'science' and herbalism as a 'tradition', there does not appear to be an ideological division. Some opinions are strongly held but differences that could fracture the community of herbalists appear to be subordinated under a shared sense of concern over impending regulatory changes that may curtail or limit the continued practise of medical herbalism.

Medical herbalism as a professional practise displays a commitment to assisting the patient in a return to well-being that supersedes any other considerations. Transcendental qualities of care appear to be freely enacted in professional practise to a greater extent than many other professionals for it appears to go beyond pragmatic concerns of financial existence, or concerns for status and recognition. The research was not designed to seek or refer to evaluative judgements of levels of care, but such a commitment to care was revealed in a pattern of asides to interviews and comments endorsed on questionnaires. Much contemporary research into professions fails to acknowledge a distinctive element of care in basic professional practise or might argue

that a researcher's objectivity, and/or eagerness for data, unquestioningly accepts respondents' statements. Feyerabend (1991) argued that social researchers pick and choose data to suit their theoretical debates and that data should not be used merely to confirm a prior theoretical view. Herbalists' altruism is noteworthy for it was not within a theoretical debate in the research design and cannot be used to confirm the researcher's prior theoretical view.

The practise of medical herbalism is based on knowledge initially gained during pre-qualifying study and training. Once qualified and beginning to practise the herbalist becomes subject to the immediacies and contexts of actual practise. The institutionalised knowledge gained during training becomes interpreted to enable successful practise. Successful practise means doing all they can for the patient which sometimes entails extending their applied knowledge to include concepts and strategies beyond their basic knowledge. As one herbalist noted "We were told of 11 plants for skin allergies but there are more". Medical herbalism is individual in its application and seems to follow Hippocratic ideas of healing through a patient-centred diagnosis, rather than disease-centred, and the use of observation and experience to apply medicines that assist the patient's body to rebalance and heal itself. The individual nature of treatment makes medical herbalism an idiosyncratic practise and herbalists recognise this — "each patient is different and needs treatment particular to him or her". This becomes 'second nature' to practise and forms part of the herbalist's self-identity internal to them: it can be viewed as part of their cultural identity as a herbalist. Herbal institutions have a social identity to a wider society that displays itself in terms of the sociocultural environment. The social identity of herbal institutions can be altered, or 'rebranded', to

accord with society's approval. It seems that approval is usually granted when society perceives conformity to its norms and no threat to the disruption of conformity. Contemporary British society has a norm of healthcare in terms of biomedical science so some herbal institutions appear to deem it necessary to present an identity that accords with that norm. Herbal practitioners, with individual and local relationships, can maintain their internal cultural identity of practising for the benefit of each individual and idiosyncratic patient.

The individual and local relationships of medical herbalists does not isolate them from a wider society and the sociopolitical environment. Herbal medicine is still considered by many scientists, doctors, and academics to be inadequately proven, of potential risk to people, and outmoded when biomedicine can serve the healthcare of the population. There is a long history of interprofessional politics that has often been dominated by medical scientists dismissing herbal medicine as unscientific and a relic of folkloric ignorance. Interprofessional politics has often been confused by a nominal division between orthodox medicine and any other medical strategy that has been generically called CAM. Many CAM supporters and practitioners are aware that there are various philosophies and modes of action in such a collection of medical strategies. Herbalists in this research expressed negative comments on several medical strategies that included physiotherapists, kinesiologists, nutritionists, aromatherapists, and crystal therapists. It is suggested that for any reasoned consideration of CAM each therapy or medical strategy should be considered individually. Maintaining an all-encompassing term fails to distinguish each therapy and promotes a 'blanket' rejection of all therapies — each therapy becomes insignificant and often evaluated by the perceived lowest

common denominator. It is suggested that it is unlikely that other CAM therapies could successfully follow herbalists, and homeopaths before them, in re-presenting their specific knowledge claims in terms of orthodox science. Not only because it has caused division, amongst homeopaths and herbalists, but more importantly many have knowledge claims that deviate too much from the 'scientific' path to knowledge or are unsuited to 'scientific' methods of investigation. The individuality of each CAM therapy can also be expressed in terms of the professionalisation process. Whilst there are some recognised preconditions and procedures in establishing an occupational group as a profession, the process of professionalisation has a temporal element that is dependent on each occupational group's resources and collective will to form a unifying body that regulates them. Many CAM therapies do not appear to seek the ultimate goal of professionalisation in state recognition.

For medical herbalists the sociopolitical environment relating to state recognition as medical practitioners seems close to resolution. It seems that the Medicines Control Agency would welcome state registration of herbalists as a strategy in the control and regulation of herbal medicines. Dialogues between representatives of the Medicines Control Agency and representatives of medical herbalists are reported to be positive and encouraging. However, some herbalists expressed fears that state recognition would only be granted for medical herbalism as a subaltern and adjunctive therapy to conventional medicine. It would seem that few herbalists would accept this as it could be perceived as a strategy to be assimilated into conventional medicine and utilised in a conventional allopathic way. Britain as a member of the EU is subject to the programme of EU harmonisation in healthcare and this is a major cause for concern

amongst herbalists. To harmonise healthcare in several countries with several distinctive cultural features is difficult; Helman (1995) has described the variation in diagnosis and treatment of medical disorders between different countries. The basis for consensual healthcare throughout the EU has to be biomedical science as it is dominant in all EU countries, and this may dictate the requirements for acceptable strategies of healthcare. It is already influential in designing regulations for the control and use of medicines and many herbalists fear further EU directives that might limit the number of herbs they can use. Thus the process of professional recognition for medical herbalists is complicated by current and possible legislation relating to the range of approved plants that may be used in herbal medicine.

In some ways this research has been considering relationships. How phytotherapy was initiated and its existence as a knowledge system is concerned with the relationship between herbalists and the orthodoxy of science knowledge-holders. The practise of medical herbalism is concerned with the relationship between herbal institutions and society, and the relationship between herbalists and their patients. Why phytotherapy is promoted is concerned with the relationship between herbal institutions and regulatory bodies and government. Despite the now acknowledged receptiveness of the medical profession for alternative therapies as complementary to orthodox medicine, herbalism still seems to be regarded with great suspicion. For various reasons other forms of alternative therapy are more accepted; homeopathy, acupuncture, and osteopathy for examples. Could the reticence in accepting herbalism be due to the fact that it is so near orthodox pharmacology. The origins of most drugs can be traced to plant material — prior to the advent of synthetic chemical drugs, the only drugs available were from

plants. It would seem logical to suppose that plant material has an already established validity as therapeutic material yet orthodox medicine is loath to acknowledge this. Is this a denial of medical history? Biomedical scientists may see more of a threat to themselves from an ancient understanding (pre-dating their own by several centuries) that is readily accepted by many people. It would appear that herbal institutions have been more accommodating in acknowledging different methodologies in therapy, conceding to, and attempting to, meet scientific demands on clinical trials as basis for empirical evidence.

An important relationship is the relationship between herbalists within the community of herbalists. There are different views regarding routes to Statutory Self-Regulation, integration with conventional medicine, or continued independence, the necessity of presenting medical herbalism as a 'science' of phytotherapy, and the usefulness of attempts to frame herbalism within biomedical science. As with any community there have been, are now, and probably will be, relationships that are less than cohesive or actually destructive to community bonds. It would appear that a core of 'tradition' in herbalism provides a bond of shared identity that overrides many differences and will assist in the formation of concerted efforts to resist any real or imagined threats to the continued existence of medical herbalism.

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Abbreviations used

BHMA - British Herbal Medical Association

BHPA - British Herbal Pracitioners Association

BJP - British Journal of Phytotherapy

BMA - British Medical Association

BMJ - British Medical Journal

CAM - complementary and alternative medicine

DoH - Department of Health

ECETOC -European Chemical Industry Ecology and Toxicology Centere

EHPA - European Herbal Practitioners Association

EJHM -European Journal of Herbal Medicine

ESCOP - European Scientific Cooperative on Phytotherapy

EU - European Union

GP - General Practitioner

ICRCH - International Council and Register of Consultant Herbalists

NIMH - National Institute of Medical Herbalists

OTC - 'over-the-counter' medicine

RCP - Royal College of Physicians

RCT - randomised control trial

TCM - Traditional Chinese Medicine

UK - United Kingdom

USA - United States of America

Appendix - Questionnaire and Interviews

This Appendix presents a list of herbalists approached in this research (p.191), a copy of an introductory letter (p. 192), and a copy of the questionnaire (pp.193-196). A schedule of interviews with selected respondents is presented (p.197) and is followed by an example of a framework for an interview and the salient points demonstrated by the interview responses (pp.199-200). Finally, tables of some responses in herbalists' interviews are presented (pp.201-205).

The Questionnaire

Questionnaires accompanied by an introductory letter were sent in November 1999 to the herbalists signified in the table on the following page where they are identified by numbers, city, and whether they returned the questionnaire. The letter was printed on University of Leeds headed notepaper with the signature and salutation hand-written and personalised for each prospective respondent. The questionnaire was set out in 12 point typeface but is reduced here to fit this document.

ID		Ret
1	North Chingford	Yes
2	Greenwich	No
3	Aspatria	Yes
4	Isleworth	No
5	North Ockendon	Yes
6	Peckham	No
7	Edinburgh	No
8	Cheltenham	Yes
9	Hereford	No
10	Totnes	No
11	Sheffield	No
12	Wolverhampton	Yes
13	Wedmore	Yes
14	Walkley	Yes
15	Eastbourne	Yes
16	Alresford	No
17	Swansea	No
18	Ottery St. Mary	Yes
19	Tunbridge Wells	No
20	Coventry	Yes
21	Liverpool	Yes
22	Llanfair. P. G.	Yes
23	Dundee	No
24	Chepstow	No
25	Market Harborough	Yes
26	Bilston	No
27	Teddington	No
28	Coulsdon	No
29	Exeter	Yes
30	Tunbridge Wells	Yes
31	Purley	No
32	Hitchin	Yes
33	Edinburgh	Yes
34	Cambridge	Yes
35	St. Helens	No
36	Ilford	No
37	Chorley	Yes
38	Forfar	Yes
39	Sutton	No
40	Blackburn	Yes
41	Hastings	No
42	Llanidloes	No
43	Edwalton	No
44	Canterbury	Yes
45	Burntwood	No
46	Launceston	No
47	Inverness	Yes
48	Bournemouth	No
49	Kirriemuir	Yes
50	Westcliff-on-Sea	Yes
51	Hebden Bridge	Yes
52	Glasgow	Yes
53	Bristol	Yes
54	Birmingham	No
55	Godalming	No
56	Malton	No
57	Bath	Yes
58	Clapham	Yes
59	Bridlington	No
60	Kensal Rise	No
61	Herstmonceux	No
62	Forest Hill	Yes
63	Wolverhampton	No
64	Oswestry	Yes
65	Portland	Yes
66	Kings Lynn	No
67	Leamington Spa	Yes
68	Fillongley	Yes
69	Mottram	No
70	Hornsea	No
71	Clapham	Yes
72	Upminster	No
73	Glasgow	No
74	Buckholt	Yes
75	Ilford	Yes
76	Featherstone	Yes
77	Pocklington	Yes
78	Bristol	Yes
79	Oxford	Yes
80	Chorley	Yes
81	Bordon	No
82	Hackney	No
83	Crouch End	Yes
84	Moreton Jefferies	No
85	Didcot	No
86	Newcastle	Yes
87	Sheffield	No
88	Chester	No
89	Chessington	Yes
90	Tunbridge Wells	No
91	Mansfield	Yes
92	Twickenham	Yes
93	Aberystwyth	Yes
94	Scunthorpe	No
95	Hackney	No
96	Llandrindod Wells	No
97	Broadway	Yes
98	Mansfield	Yes
99	Moseley	Yes
100	Grendon	No
101	Battle	No
102	Partridge Green	No
103	Drybrook	Yes
104	Glastonbury	No
105	Lyme Regis	No
106	Edinburgh	No
107	Liverpool	Yes
108	Ross-on-Wye	Yes
109	Glasgow	Yes
110	Totnes	No
111	Seaton Sluice	Yes
112	Oxford	No
113	Shrewsbury	No
114	Sheffield	No
115	Eastbourne	Yes
116	Kingsbridge	No
117	Beeston	Yes
118	Southall	No
119	Ludlow	Yes
120	Lincoln	No
121	Wellington	Yes
122	Whitbourne	No
123	Emsworth	Yes
124	Belmont	Yes
125	Walthamstow	No
126	Wimbledon	Yes
127	Earley	No
128	Clapham Common	No
129	Huddersfield	No
130	Chichester	No
131	Cardiff	No
132	Ipswich	Yes
133	Preston	No
134	Exmouth	No
135	Burwash	Yes
136	Birmingham	Yes
137	Harrow	No
138	Hastings	No
139	Hull	No
140	Neath	No
141	Fochabers	Yes
142	Teddington	No
143	Bournemouth	Yes
144	Blackwood	No
145	Bristol	Yes
146	Driffield	No
147	Boston	No
148	Penarth	Yes
149	Wilmslow	Yes
150	Oswestry	No
151	Craven Arms	No
152	Sheffield	No
153	Chulmleigh	Yes
154	Porth	No
155	Sherborne	Yes
156	Wigan	Yes
157	Bolton	No
158	Reigate	Yes
160	Crediton	Yes
161	Barnstaple	Yes
162	Leeds	Yes
163	Sheffield	Yes
164	Leeds	Yes
165	York	Yes
166	Leeds	Yes
167	Enfield	Yes
168	Exeter	Yes
169	Glasgow	Yes
171	Hay-on-Wye	No
172	Sale	No
173	Finchley	No
174	Greenwich	No
175	Argyll	Yes
176	Canterbury	No
177	Newark	No
178	Tottenham	No
179	Swansea	No
180	Birmingham	No

Introductory Letter

Herbal Medicine as a Professional Practise

The British practise of western herbal medicine has not been the focus of much academic research (although Barbara Griggs' scholarly *New Green Pharmacy* does provide a comprehensive overview). Too often herbal practise has been included in discussions regarding the many forms of alternative and complementary therapies and thereby not accorded individual significance. I am undertaking research into recent developments within herbalism and its recognition by policy-makers as a registered professional practise. My research should produce a deeper understanding of herbal medicine as a professional practise and as a distinctive system to be integrated within a wider choice of care.

To assist my research I am asking you to spare some of your valuable time (approximately 10 minutes) in answering a few questions. The first set of questions describes aspects of your practice and the second set asks for your views regarding some recent developments in Herbal Medicine.

This questionnaire is being sent to registered herbal practitioners only and, naturally, all replies will be treated in the strictest confidence. I would be grateful if you could spend some time in completing the questionnaire and returning it in the enclosed pre-paid envelope within the next two weeks.

Yours sincerely

Ed VanMarie

The Questionnaire

Could you please answer all questions by ticking the relevant box and/or inserting details where requested. If you wish to comment on the questionnaire or add further details to your answers, please use the reverse of this paper.

1) Was your training in herbal medicine via
The School of Phytotherapy (ex School of Herbal Medicine) [ ]
The General Council and Register of Consultant Herbalists [ ]
University [ ]
Apprenticeship to an established and experienced herbalist [ ]
Other (please specify)
.....

2) When did you qualify as a medical herbalist? [.....]

3) In which year did you commence practice? [.....]

4) Which journals relating to health and medicine do you regularly read?
British Journal of Herbal Medicine [ ]
British Medical Journal [ ]
European Journal of Herbal Medicine [ ]
Herbalgram [ ]
Journal of Alternative and Complementary Medicine [ ]
Lancet [ ]
Phytomedicine [ ]
Others (please specify)
.....

5) As an average, how many hours per week do you practice? up to 8 hours [ ]
9 - 16 hours [ ]
17 - 30 hours [ ]
31 - 40 hours [ ]
over 40 hours [ ]

6) As an average, how many days per week do you practice? [.....]

7) Approximately how many patients are currently on your records? [.....]

8) What is an average time (in minutes) for consultations?
Initial consultation [.....]
Subsequent consultation for the same condition [.....]

9) Approximately what percentage of your patients have been referred to you by a GP or Consultant?
0% [ ] 1% - 5% [ ] 6% - 10% [ ] 11% - 20% [ ]
if more than 20% please specify the percentage [.....]

10) Do you practice alongside other healthcare professionals?

No - own premises	[ ]
within a GP's clinic	[ ]
within an orthodox health clinic	[ ]
within a complementary health clinic	[ ]
shared premises with others	[ ]

11) Do you have another occupation? YES [ ] NO [ ]

If NO please go to question 12

11a) If YES, please state your other occupation.....

11b) Is herbal practice your prime source of occupational income? YES [ ] NO [ ]

12) What, if any, was your previous occupation before becoming a herbal practitioner?

.....

Thank you for describing your practice. Apart from developments in the political environment for professional practice, there appear to be several references to herbal medicine as phytotherapy. It could be argued that phytotherapy is often referred to in scientific terms whilst herbal medicine is a tradition of experienced knowledge. Please answer this second set of questions with your own personal views.

13) Could you briefly describe what you regard as three key features of phytotherapy?

14) In what respects, if any, would you liken your practice to phytotherapy?

15) In what respects, if any, would you differentiate your practice from phytotherapy?

16) In your view, how many herbal practitioners are enthusiastic about phytotherapy?

10% [ ] 20% [ ] 30% [ ] 40% [ ] 50% [ ]
60% [ ] 70% [ ] 80% [ ] 90% [ ] 100% [ ]

17) Do you think that herbal medicine can be affected by a promotion of phytotherapy?

YES [ ] NO [ ]

If YES, positively affected [ ] or negatively affected [ ]

18) Do you think that European legislation has affected how you practice? YES [ ] NO [ ]

If YES, could you specify in what way and whether for better or worse.

19) Do you think that European legislation might, in the forseeable future, affect how you practice?

YES [ ] NO [ ]

If YES, could you suggest in what way and whether for better or worse.

20) Do you think considerations of state registration have affected how you practice?

YES [ ] NO [ ]

If YES, could you specify in what way

21) How do you think healthcare institutions (Dept of Health, NHS, BMA, RCP, etc.) perceive the professional status of other practitioners when compared to herbalists?

Consultant Physicians have
Higher professional status [ ] Same professional status [ ] Lower professional status [ ]
General Practitioners have
Higher professional status [ ] Same professional status [ ] Lower professional status [ ]
Homeopaths have
Higher professional status [ ] Same professional status [ ] Lower professional status [ ]
Nurses have
Higher professional status [ ] Same professional status [ ] Lower professional status [ ]
Opticians have
Higher professional status [ ] Same professional status [ ] Lower professional status [ ]
Pharmacists have
Higher professional status [ ] Same professional status [ ] Lower professional status [ ]
Physiotherapists have
Higher professional status [ ] Same professional status [ ] Lower professional status [ ]

22) Do you consider that herbalists' professional status - as perceived by healthcare institutions - has improved in the past 5 years? YES [ ] NO [ ]

If YES, could you briefly say in what way it has improved

Would you like to receive a summary of the research findings? YES [ ] NO [ ]

One final question; are you willing to be interviewed? I wish to interview a number of herbal practitioners about associations of phytotherapy with a 'science' of herbal medicine and how this affects the profession. Interviews should last approximately 1 hour, will be recorded on audio tape (if agreed beforehand), and will be arranged for a time and place at your convenience. If you are prepared to help me further with an interview, please note your name and contact address or telephone number.

.....

.....

Thank you for your time and consideration in completing this questionnaire. You have contributed to a wider understanding of herbal medicine as a distinctive medical practice.

Interviews

Interviews usually lasted for 45 minutes to 1 hour with the occasional short interview only lasting approximately 35 minutes and one or two interviews lasting 2 hours or more. Shorter interviews would seem to have been more focussed and the longer interviews involved many asides and discussions relating to my research, the availability of CAM, differing philosophies of healing, and the reclamation of historic medical interventions. The interviews with those herbalists shown in the following table were during the period June 1998 — July 2000. Herbalists are identified by their listing number on page 191 (second page of this Appendix).

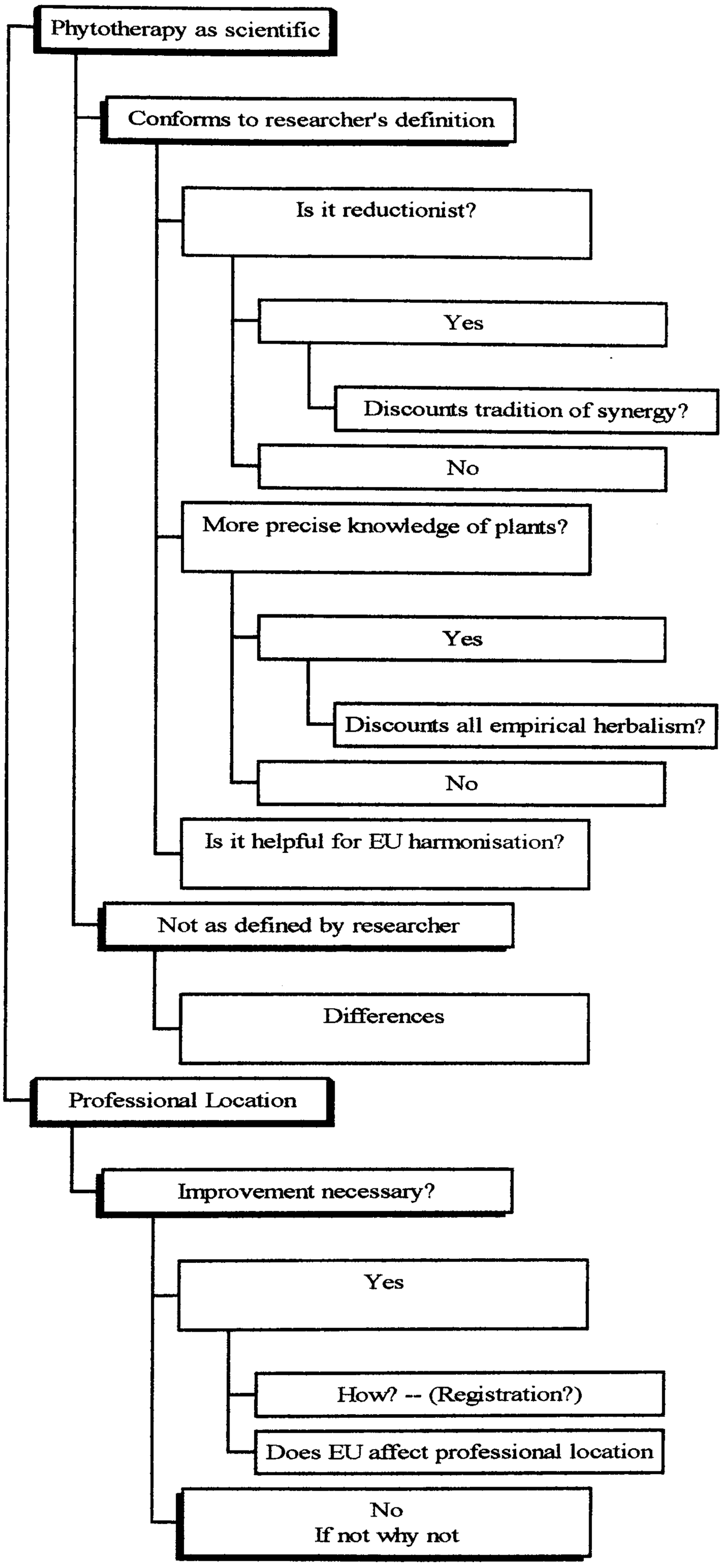
June 1998	163, Sheffield
July 1998	162, Leeds; 164, Leeds; 166, Leeds
June 1999	165, York
July 1999	160, Crediton; 161, Barnstaple; 168, Exeter
August 1999	142, Teddington; 167, Enfield; 173, Finchley; 174, Greenwich
September 1999	175, Argyll
October 1999	42, Llanidloes; 51, Hebden Bridge
December 1999	77, Pocklington; 169, Glasgow
January 2000	32, Hitchin; 34, Cambridge; 112, Oxford
February 2000	21, Liverpool; 107, Liverpool; 156, Wigan
	149, Wilmslow; 172, Sale
	53, Bristol; 74, Monmouth; 171, Hay-on-Wye
April 2000	98, Mansfield; 117, Beeston; 177, Newark
May 2000	97, Broadway; 121, Wellington
June 2000	115, Eastbourne; 176, Canterbury; 178, Tottenham

As noted in Chapter 3 the herbalists to be interviewed were selected by consideration of the pragmatics involved in travelling to each herbalist but, more importantly, in respect of clearly expressed answers and comments to the questionnaire. Herbalists were sought who appeared to represent differing views of herbalism being understood

in a 'scientific' framework. It might be argued that they represent the two extremes of a dialectic within contemporary British herbal medicine but in the context of a number of interviews with herbalists I would prefer to think in terms of, what Keith Robertson called, "wings" of herbalism. There is undoubtedly a spectrum of views and attitudes to how herbal medicine should be represented that may be roughly categorised as the scientific approach and the energetic approach. This does not necessarily always equate with labels of 'phytotherapist' and 'traditional herbalist' as many herbalists seem to readily embrace scientific explanations for the active constituents of herbs, may welcome clinical trials of the efficacy of herbs, and term themselves as phytotherapists, yet recognise the synergistic action of herbs in rebalancing the body's own healing energy and use 'unscientific' diagnostic strategies (e.g. iridology) and/or 'unscientific' adjunctive therapies (e.g. aromatherapy).

Interviews were conducted within a framework designed for each interviewee and based on each interviewee's responses and comments annotated on the returned questionnaire. An example of such a framework is shown on the following page. This person's questionnaire responses had indicated a scientific framework for their knowledge and practise of using herbal medicines — recognising himself as a phytotherapist and eschewing an "energetic approach" to herbal medicine. Consequently the interview was planned to elicit comments and attitudinal responses to an elaboration of how the 'science' of phytotherapy relates to biomedical science and a more traditional herbalism. Also personal views of the current professional location for phytotherapists and any influence that the EU may have on such a location were to be asked for.

A 'Phytotherapist'



This interview was planned to be concise and concentrate on six main questions: it was with a recently trained medical herbalist (No.77) who prefers to consider the action of herbal medicine within a rationale of science similar to the established orthodoxies of pharmacology and biomedicine. He described phytotherapy as a scientific approach which he defines as "not necessarily reductionist" nor a "necessarily more precise" knowledge of plants and how they work. For him the scientific approach was "more relevant to the modern setting in which we exist" and that this approach to the knowledge of plants and how they work brought it "kicking and screaming into the twenty-first century". He suggested that whilst "some people are worried" that the scientific approach might be reductionist there were "a lot of people even within the sort of scientific approach of herbal medicine that still recognise the value of the whole herb". He thought a scientific approach was helpful in gaining acceptance for herbal medicine within a European harmonisation programme as it "gives the orthodox profession ... something to grasp and to sort of assess it". The importance of orthodox medical professions was highlighted by his statement that "they have a big say in ... regulation of alternative medicine". An improved professional location amongst orthodox medical professions was thought by him to be "beneficial" and he would "certainly like that to happen". He suggested that this could be achieved through "some kind of state registration" which would also "improve our chances within a Europeanisation system" as he understood that "some people feel that the medical herbalists should be squeezed out".

Questionnaire responses and comments presented patterns that related to themes within the aims and objectives of the research. Interviews, as the above example shows,

provided opportunities for comment on these themes, as well as clarification and elaboration of details relevant to such themes. The themes could be labelled as 'Phytotherapy as Scientific', 'Any distinction between Phytotherapy and Traditional Herbalism', 'Practise by Practitioners', 'Altruism' (the unforseen theme), 'Politics and Regulation', and 'Fears and Anxieties'. The following tables list some of the herbalists' interview responses as they relate to these themes.

Phytotherapy as Scientific

32 - "pharmacology is known. I do use a lot of science, be it pharmacology or medicine in the allopathic sense in my practise. I am a member of the College of Practitioners of Phytotherapy". 34 - "scientific approach to diagnosis and treatment". 51 - "plants actions related to knowledge of their constituents with known pharmacological action, plants chosen for purpose of matching pharmacological effect with perceived physiological imbalance or pathology". 97 - "more emphasis placed on the testing of individual plant ingredients under scientific conditions". 98 - "rationalistic, reductionist view of healthcare, based on scientific research, and often using isolated plant extracts". 121 - "Science-based approach, I know the pharmacology and the latest scientific findings". 163 - "phytochemistry provides proof of safety and perhaps efficacy". 164 - "it's a therapeutics rationale based on modern scientific analysis of plant properties". 167 - "to relate to medicine it must be scientific". 168 - "the reality of the modern world demands adherence to a scientific framework".

Phytotherapy/Herbalism

21 - "I do not differentiate between the terms, herbalism should be an art and a science". 53 - "the two are synonomous". 74 - "the term has been used to diminish the practise of herbal medicine, it's a way of separating oneself from one's patients". 107 - "two sides of the same coin". 117 - "I don't make any distinction between the two". 149 - "a misleading term, it bridges what some regard as the gap between scientific theory and empirical knowledge, it blankets the crucial significance of physiomedicalism and is tending to neglect what is the cornerstone of herbalism which is the need to remember the harmony which Nature provides". 160 - "I dislike the term, it was introduced as a strategy for recognition". 161 - "herbalism is from a different philosophy, research is important but a scientific methodology is difficult to apply to herbalism". 165 - "it's only describing what we've always done in a different way". 166 - "search for a 'respectable' name, a divisive force within the profession". 169 - "it's not where our roots are at all". 172 - "the practise of phytotherapy and herbalism are synonomous". 173 - "phytotherapy is a male-dominated approach". 174 - "should be synonomous with herbal medicine but can be overly concerned with the chemical make up of plants". 175 - "playing with words". 178 - "phytotherapy is the latin name for herbal medicine introduced as an attempt to gain further orthodox recognition".

Practise by Practitioners

21 - "good practise would incorporate scientific knowledge alongside valuing clinical experience and traditional knowledge". 32 - "I am ready to employ purely traditional techniques if there is no ready solution via phytotherapy, we must not lose our traditional values, too much knowledge is lost this way". 34 - "a broad approach". 42 - "I practise as a traditional herbalist". 51 - "Sometimes I use herbs in the symptomatic phytotherapy way for relief of symptoms but I'm always aware of the larger picture, the deeper causes and move on to treat these". 77 - "I use some plants for which there is little evidence for use". 97 - "more emphasis placed on traditional use and on the holistic approach". 98 - "my practise is holistic based, treating the whole person, using whole plant extracts and based on experiential knowledge as well as scientific research". 107 - "despite scientific training prior to herbal medicine I practise in an untuitive way". 117 - "I use a less scientific approach than some of my colleagues". 121 - "my practise is broader and more holistic". 149 - "I practise holistically in accord with natural rhythms and the emotional, mental, and spiritual aspects of the human organism". 160 - "my practise uses a holistic approach, not reductionist". 161 - "ultimately, clinical experience is more influential than scientific research". 162 - "scientific knowledge comes together with a holistic approach to form the practise of herbalism". 164 - "the biomedical model is not conducive to a holistic practise". 165 - "the practise of herbal medicine is a part of healing". 168 - "a practise that encompasses much of the philosophy and scientifically unproven aspects of herbalism". 173 - "I see research and science as important but as a supplement to the way I practise". 174 - "I treat people holistically trying to treat the cause of the problem rather than the symptoms".

Altruism

32 - "If I take three hours to see a patient it's because I think he needs to talk about his problem and what the underlying cause of his problem is. It may take that three hours but it's not fair to charge him for the whole three hours. He's come to me for help and I do my best for my patients which does not include making a lot of money out of them". 51 - (referring to any ban on herbal practise) "I suppose if that happened some of us would have to go 'underground' again as we did before, I certainly would because I do this for my patients". 74 - "always practise to the best of my ability in the most professional way for the good of my patients". 98 - "it's all for the patients not money". 117 - "If you believe in what your doing you don't think about it as a profitable business". 121 - "I practise to the highest professional standards and do this irrespective of anything except my patients' thanks". 149 - "I intend to practise come what may, my patients come first". 160 - "I do whatever is in my control for my patients". 164 - "My charges can only be what my patients can manage, it's their welfare that matters". 169 - "herbalists are the most caring, supportive and democratic groups of people". 171 - My overriding concern is for my patients". 175 - "few can afford a consultation but people come for free information and assistance, I see patients at home if they can't travel". 178 - "practise to the best of my ability and for the benefit of patients".

Politics and Regulation

21 - "we should be registered". 32 - "it would be nice to see the possibility of extending knowledge to MSc or PhD, it can only be good, it will make our position safer in law". 34 - "registration is necessary now before Euro law makes us illegal". 51 - "registration would highlight herbalists' clinical and medical expertise". 53 - "we would be visible to the government if we were registered". 74 - "I will welcome state registration". 98 - "records and notes are already kept in a professional manner without the government okaying us as state registered". 160 - "our training already qualifies us as professionals". 164 - "talk of registration has brought issues of integrity and patient care into focus". 166 - "NIMH already has the core professional competences it just needs the government's recognition now". 173 - "I hope very much that we will become registered and recognised".

Fears and Anxieties

21 - "we could be pushed out and our medicines absorbed by orthodox medicines".
32 - "our right of diagnosis under Common Law could disappear with EU laws, it could well mean the end of herbal practise". 34 - "the future is uncertain we could lose our medicines". 42 - "there's a threat to our medicines". 51 - "possible restrictions on medicines and our own preparations". 53 - "regulation of herbs". 77 - "it may restrict remedies and our rights to practise". 97 - "may be an attempt to curtail our freedom of practice". 107 - "I don't take the future for granted". 117 - "threat of restriction to practise". 121 - "it could restrict the herbs available to me and could prevent me from practising altogether". 156 - "herbs could become confined to doctors". 165 - "increasing commercialisation and promotion of proprietory herbal medicines". 166 - "a further loss of available medicines". 168 - "the possibility of herbalism being swallowed up by orthodox medicine". 171 - "losing medicines and/or the legal right to practise". 173 - "we may lose the right to parts of our pharmacopaeia". 177 - "those not medically trained in orthodox medicine may find it difficult to practise at all".