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THE ENCHANTMENT OF WESTERN HERBAL MEDICINE

GUY WADDELL

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the University of Westminster for the degree of Doctor of
Philosophy

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ABSTRACT

In the UK the profession of Western Herbal Medicine (WHM) has had to engage with politics and with science in order to survive. Social science work on WHM suggests that traditional knowledge is being overtaken by biomedical knowledge, with one paradigm replacing another, although collaboration with science is also seen as possible. Throughout this work the voices of herbalists themselves have rarely been presented. Drawing from a biographic narrative approach to interviewing, along with supporting ethnographic methods, thirteen cases of individual herbalists are presented here. Eight out of the thirteen cases reveal 'visible entryways' to becoming herbalists - beginnings that are congruent with WHM as an increasingly professionalized practice. However, five of these eight cases reveal some sort of 'enchantment' with plants or herbal medicines as being important for their practices. Enchantment is characterized as a sensual affective energy and is situated among debates, initiated by Max Weber, on the place of enchantment and disenchantment in the modern world. The five remaining cases reveal 'hidden entryways', where there are sensual enchanted experiences of crossings between humans and plants on the road to becoming herbalists, often at a young age. Enchantment is also found later on in most of these narratives.

The thirteen cases suggest that, rather than a paradigmatic takeover of WHM by science, there is an enchantment of some herbalists by plants and medicines that includes both scientific and traditional approaches to practice. It is argued that the meeting and crossing of herbalists with plants and medicines allows herbalists to draw easily from a diverse range of influences that others may see as incommensurable. Herbs, rather than concepts and theories are, for the most part, at the centre of WHM.

The findings suggest that plants and herbal medicines may be seen as having more agency than has been previously considered. Drawing on a herbalist's engagement with Ivan Illich it is asked whether herbs and herbalists may be seen as each other's 'convivial tools'.

Beyond WHM, in the plant sciences, the agency of plants is being investigated in the controversial field of plant behaviour and plant neurobiology where the possibility of plant intelligence is raised. Within the social sciences, posthumanism and ontological turns also address the agency of the non-human, where plant agency is beginning to be considered. It is asked whether the profession of WHM in the UK should engage with these developments in the plant and social sciences in order to establish additional networks of support.

Key words: Western Herbal Medicine; herbs; herbalists; enchantment; narrative; entryways; agency.

CONTENTS

PART I: INTRODUCTION, BACKGROUND AND LITERATURE

| | |
|--|-----|
| <u>CHAPTER 1: INTRODUCTION</u> | p1 |
| Aims, question and objectives..... | p2 |
| Thesis outline..... | p3 |
| | |
| <u>CHAPTER 2: A FRAGMENTED HISTORY OF WESTERN HERBAL MEDICINE</u> | p7 |
| Orthodox and herbal medicine: a long goodbye..... | p8 |
| Herbalists defined by their medicines..... | p9 |
| British herbal medicine in harmony with nature and with America..... | p10 |
| | |
| <u>CHAPTER 3: A POLITICAL HISTORY OF THE PROFESSION</u> | p14 |
| Herbalists in search of a (consulting) room of one's own..... | p15 |
| Western Herbal Medicine hidden by CAM, herbs hidden by politics..... | p23 |
| | |
| <u>CHAPTER 4: The PROFESSION AND SCIENCE</u> | p27 |
| Journals..... | p27 |
| Pharmacopoeias..... | p31 |
| Training..... | p34 |
| | |
| <u>CHAPTER 5: PARADIGMS AND BEYOND - VIEWS ON WESTERN HERBAL MEDICINE FROM THE SOCIAL SCIENCES</u> | p42 |
| Mapping of practice..... | p42 |
| Paradigms and herbal knowledge..... | p44 |
| Beyond paradigms..... | p46 |

PART II: METHODOLOGY AND THEORETICAL UNDERPINNINGS

| | |
|--|-----|
| <u>CHAPTER 6: METHODOLOGY - ARRIVING AT NARRATIVE</u> | p52 |
| The appeal of ethnography..... | p52 |
| The difficulty of ethnography in WHM..... | p53 |
| Looking to cases, lists and walks..... | p55 |
| A narrative backbone..... | p56 |
| A walk through narrative..... | p58 |
| Biographic Narrative Interview Method for data collection..... | p59 |
| From a happy semantic confusion to a research question..... | p61 |
| Developing an analytical approach..... | p61 |

| | |
|-------------------------------------|-----|
| The herbalists..... | p63 |
| Selecting herbalists..... | p64 |
| Selecting and presenting cases..... | p65 |

| | |
|-----------------------------------|-----|
| <u>CHAPTER 7: ENTRYWAYS</u> | p67 |
| Visible Entryways..... | p68 |
| Hidden Entryways..... | p71 |
| Crossings..... | p72 |
| A Question..... | p74 |

| | |
|--|-----|
| <u>CHAPTER 8: CONCEPTUAL ORIENTATIONS</u> | p75 |
| Max Weber, disenchantment of the world, and the profession of Western Herbal Medicine..... | p78 |
| Bruno Latour, relational agency, explaining ‘hidden’ entryways, and the disenchanting hybrids of Traditional Herbal Registrations.... | p82 |
| David Abram and the senses of Western Herbal Medicine..... | p87 |
| Bronislaw Szerszynski, enchantment and the axes of Western Herbal Medicine..... | p89 |
| Jane Bennett, modern enchantment and the sensual affective energy of Western Herbal Medicine..... | p91 |

PART III: CASES

| | |
|--|------|
| <u>CHAPTER 9: VISIBLE ENTRYWAY HERBALISTS</u> | p100 |
| <u>TE</u> :..... | p100 |
| Entryways..... | p100 |
| Like a GP, but more so..... | p101 |
| Like a GP, but less than..... | p105 |
| Relying on (a lack of) evidence..... | p106 |
| Reflection on TE..... | p108 |
| <u>CP</u> :..... | p110 |
| Entryways..... | p110 |
| Chinese Medicine: the triumph of theory..... | p112 |
| Always <i>Vitex</i> : the triumph of empiricism..... | p113 |
| Side by side: Chinese herbs and Western herbs..... | p114 |
| Reflection on CP..... | p116 |
| <u>EP</u> :..... | p117 |
| Entryways..... | p117 |
| Learning through challenging patients..... | p118 |
| Green medicine – the triumph of empiricism..... | p119 |

| | |
|--|------|
| Chinese Medicine – the triumph of theory..... | p121 |
| The safety of WHM, the attraction of Chinese Medicine..... | p123 |
| Reflection on EP..... | p124 |
| | |
| <u>JK:</u> | p126 |
| Entryways..... | p126 |
| Hein Zeylestra and training: the rise of science and the decline of Physiomedicalism..... | p126 |
| The continuing influence of Physiomedicalism on JK Proper diagnosis..... | p130 |
| Three patients: ‘proper diagnosis’ and Physiomedicalism..... | p131 |
| JK’s Wood..... | p135 |
| Reflection on JK..... | p137 |
| | |
| <u>Reflection on TE, CP, EP and JK</u> | p138 |
| | |
| <u>SB:</u> | p139 |
| Entryways..... | p139 |
| Orthodox, but beyond..... | p140 |
| Root causes – onions, triggers and kernels..... | p142 |
| Feelings for people and plants..... | p146 |
| Reflection on SB..... | p148 |
| | |
| <u>FD:</u> | p150 |
| Entryways..... | p150 |
| Up against authority – professional life, Gerson Therapy and statutory regulation..... | p150 |
| Finding home in a community..... | p154 |
| A near-death accident, and knowing herbs differently..... | p155 |
| A helpful tree..... | p158 |
| Wise woman versus professional herbalist..... | p160 |
| Reflection on FD..... | p163 |
| | |
| <u>GA:</u> | p164 |
| Entryways..... | p165 |
| Transformative Energy..... | p167 |
| A herbalist in a GP practice and in a CAM practice..... | p170 |
| St Cuthbert and the pleasure of small signs..... | p173 |
| Everything I do is herbal medicine..... | p175 |
| Reflection on GA..... | p175 |
| | |
| <u>MN:</u> | p177 |
| Entryways..... | p177 |
| Krebs cycle and Ayurveda..... | p178 |

| | |
|---|------|
| Goethean Science: knowing plants..... | p180 |
| Goethean Science: knowing patients..... | p184 |
| A Goethean consultation..... | p185 |
| Reflection on MN..... | p189 |

| | |
|--|------|
| <u>Reflection on visible entryway herbalists:</u> <u>the pull of enchantment.....</u> | p191 |
|--|------|

CHAPTER 10: HIDDEN ENTRYWAY HERBALISTS..... p193

| | |
|--|------|
| <u>CT:</u> | p193 |
| Entryways..... | p193 |
| Professionalization and then de-professionalization..... | p195 |
| Pharmacology and psychotherapy..... | p196 |
| A complex patient..... | p200 |
| Complexity theory..... | p201 |
| Reflection on CT..... | p203 |

| | |
|---------------------------------|------|
| <u>RC:</u> | p204 |
| Entryways..... | p204 |
| Finding his Theory of Cure..... | p206 |
| A priestly approach..... | p211 |
| Reflection on RC..... | p213 |

| | |
|-------------------------------------|------|
| <u>Reflection on CT and RC.....</u> | p214 |
|-------------------------------------|------|

| | |
|---|------|
| <u>AF:</u> | p214 |
| Entryways..... | p214 |
| Three Theories of Cure..... | p216 |
| 1 st Theory of Cure: working with physiology..... | p216 |
| 2 nd Theory of Cure: emotional causes of illness..... | p217 |
| 3 rd Theory of Cure: constitutional medicine and energetics..... | p220 |
| Spirit and a sense of place..... | p225 |
| Reflection on AF..... | p228 |

| | |
|--|------|
| <u>BC:</u> | p229 |
| Entryways..... | p229 |
| Patients' stories..... | p231 |
| BC's stories: A bowl of water, Young maids, and nonhuman communication..... | p235 |
| A local knowledge holder..... | p240 |
| Local medicine..... | p242 |
| Reflection on BC..... | p245 |

| | |
|--------------------------|------|
| <u>KA:</u> | p246 |
| Entryways..... | p246 |
| Talking with Nature..... | p247 |
| Field-work..... | p253 |
| Reflection on KA..... | p255 |

| | |
|--|------|
| <u>Reflection on hidden entryway herbalists: from spirits to physical nature</u> | p256 |
| <u>The Push of Enchantment</u> | p259 |

PART IV: DISCUSSION AND CONCLUSION

| | |
|--|------|
| <u>CHAPTER 11: BEYOND CASES</u> | p262 |
| Cases versus paradigms, history and the profession..... | p262 |
| Herbalists and Western Herbal Medicine..... | p266 |
| Beyond the science/tradition dichotomy in Western Herbal Medicine..... | p266 |
| Enchanted trees and rhizomes in Western Herbal Medicine..... | p268 |
| Crossings and difference in Western Herbal Medicine..... | p270 |
| Plants and texts in Western Herbal Medicine..... | p271 |
| The agency of herbs at the centre of Western Herbal Medicine..... | p273 |
| Herbs and Herbalists: each other's convivial tools..... | p275 |
| Enchantment in orthodox medicine and CAM..... | p281 |

| | |
|--|------|
| <u>CHAPTER 12: BEYOND WESTERN HERBAL MEDICINE</u> | p284 |
| The place of plants..... | p284 |
| Changing perceptions of plants in plant science..... | p285 |
| Making room for non-humans (and even plants) in the social sciences..... | p294 |
| Posthumanism, an ontological turn and Haraway..... | p294 |
| Plant persons and plant thinking..... | p297 |
| Western Herbal Medicine: looking forward..... | p299 |

| | |
|--|------|
| <u>Appendix 1: BC on Gallant Soldier</u> | p301 |
|--|------|

| | |
|-------------------------|------|
| <u>References</u> | p305 |
|-------------------------|------|

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STATEMENT OF ORIGINALITY

I confirm that this thesis, submitted for the Degree of PhD, is original and entirely my own work.

PART I: INTRODUCTION, BACKGROUND AND LITERATURE

CHAPTER 1: INTRODUCTION

On the entrance door to a Complementary and Alternative Medicine (CAM) clinic in the UK there is a sign that gives a menu of the therapies available. Amongst Acupuncture, Homeopathy, Healing and many others is 'Herbal Medicine (Western)'. This sign was put up in the late 90s, with '(Western)' necessary to differentiate herbal medicine from Chinese Herbal Medicine that was making its presence felt on the high street in the UK. Eventually it became known as Western Herbal Medicine. As a healing art that has persisted yet is barely acknowledged in the West, Western Herbal Medicine (WHM) appears to be a mass of tensions.

Being 'Western' is partly a claim to modernity, yet it uses many plant species that would have been used millennia ago. Stewart (2010) suggests that while herbal medicine can be seen as a traditional medicine, putting 'Western' before 'Herbal Medicine' aligns it with a European philosophical basis. Most of its practitioners are not medical doctors, but their training includes much orthodox medicine. As a medical approach WHM transfuses much black-boxed knowledge from orthodox medical curricula, yet it prescribes 'dirty pharmaceuticals' made from once living organisms, often including at least some unknown and un-quantified constituents.

Nissen and Evans (2012) point out that there is no generally agreed upon definition of WHM. They argue that it is sometimes aligned with a scientific or 'phytotherapeutic' approach to prescribing herbal medicines for patients, while others look to its American roots in the Physiomedical and Eclectic traditions which were taken up in the UK, or to the concepts of holism or vitalism, or to an understanding of WHM that uses plants that are mostly native to Europe and North America.

Some of these plants can be found growing in the UK between cracks in the pavement as well as in parks and gardens and in the countryside, yet they may also be borrowed from other traditions such as Ayurveda and Chinese Medicine. Jackson-Main (2005) points out that WHM can be a misleading term in that it breaches cultural and national borders and uses

herbs and approaches from other traditions outside the 'West'. He argues that it 'almost defies definition' (p89).

As a Western healing art it is practiced in the UK, America and Canada, but also in the Southern hemisphere countries of Australia and New Zealand. WHM refers to a large geography yet practitioners often prefer to use medicines that they know as local plants. Its dominant language is English but some herbalists seek to understand what plants are telling them.

Contradictions and tensions, of course, are not specific to WHM.

Referring to Chinese Medicine and other medical traditions undergoing modernization as well as to biomedicine, Scheid (2002) states that 'Wherever we look, syncretism and ambiguity abound' (p10).

Despite the presence of plurality in diverse healthcare practices, WHM does not convey as clear an identity as many other practices. Looking back to the CAM clinic door, acupuncture has its meridians and yin, yang and zheng, homeopathy has Samuel Hahnemann, trituration, succession, potencies and 'like cures like', and healing has its laying on of hands to remove obstructions, but it is not clear what might be at the core of WHM or even if it has core at all. This thesis seeks to unravel WHM in the UK. However, a caveat is necessary here: despite WHM being the subject matter of this thesis, the reader is reminded that WHM is a concept and does not exist as a bounded object. Rather, it is something to work with.

Aims, question and objectives

While much of the landscape and profession of WHM is influenced by science, an intention of this research is to investigate whether this involvement with science captures the experience of herbalists or whether something else is going on. This necessitates bringing the herbalists themselves into the presented material, something that has been curiously missing from previous work. And if their voices are to be heard then their beginnings must be attended to. One aim is to identify why and how people come to be herbalists, to join a profession that is marginalized within healthcare practices, at the centre of modernity yet

using age-old tools. Another aim is to consider what impact the once living-ness of herbal medicines has on herbalists, their practices and WHM. A final aim is to contextualize this within wider conceptual and theoretical frameworks and to look for resonances in other knowledge practices.

From these aims the research question was arrived at. How do people get drawn to learning and practicing WHM and what is the relationship between these entryways, the rest of their narratives and WHM?

The objectives of the research thus became: to research the history of the development of the profession of WHM in the UK; to identify and critically evaluate the social science literature on WHM; to identify herbalists with a wide variety of approaches to practice; to collect their biographic narratives using an interview methodology that seeks to cede control to the interviewee; to collect ethnographic data from the observation of consultations; to develop a theoretical and conceptual framework for the research that arises out of the primary data; to develop an approach to the analysis of the data collected that keeps the cases and voices intact but allows theoretical exploration; to compare the social science and historical data with the collected cases; and to identify spheres beyond WHM that offer fruitful associations with the findings of the cases.

Thesis outline

To state the obvious, WHM is important to itself. In the UK it is important to the 800 or so practitioners that make up its numbers as well as to their patients and to the training institutions and professional associations. Beyond itself, WHM is of interest to a powerful skeptic lobby in the UK that sees it lacking a solid evidence base and is opposed to WHM's political recognition as a healthcare practice. However, looking beyond itself and its local politics, WHM, in its engagement with living plants and with herbal medicines, will be shown to have relevance to those that seek to move the human from the epicenter of everything and look to new ways of working with the non-human.

This research will show that hidden experiences of ‘crossings’ with plants, where the boundaries between species are blurred, are important in some herbalists’ routes to studying and practicing WHM and are also to be found in the later parts of these and other herbalists’ narratives. This constitutes the ‘push’ and ‘pull’ of ‘enchantment’, which will be seen to be a sensual affective energy that spreads throughout many, but not all, of the narratives and which embraces both more scientific and more traditional ways of doing herbal medicine. This enchantment sometimes starts before formal study begins, including at very young ages, and sometimes afterwards. It will be argued that the meeting and crossing of plants and herbalists allows herbalists to draw easily from a diverse range of influences that others may see as incommensurable, and challenges the view that WHM is being ‘mainstreamed’ or ‘taken over’ or ‘coopted’ by science.

Despite the profession’s engagement with science and politics, which necessarily separates herbs from herbalists, it will be shown that crossings of herbalists with plants and herbal medicines, and the syncretism of diverse influences, are to be found in WHM. While other traditions that use herbal medicines have concepts as their central institutions, this research suggests that WHM has the material herbs themselves, even if this sometimes leads herbalists to look ‘outside’ for concepts that meet their needs. Meadowsweet, Horsetail, Yarrow, Lady’s Mantle, Hawthorn, Betony, Black Cohosh, various Ginsengs and Sage, to name but a few, are at the centre of WHM.

The centrality of herbs and their sensual ability to enchant herbalists raises questions about the agency of living plants and of herbal medicines. It also raises questions about how the relationship between herbalists and plants may be reconceived. Following a herbalist’s suggestion that herbs may be seen as examples of Ivan Illich’s ‘convivial tools’, it will be asked whether herbalists and herbs can be seen as each other’s convivial tools.

There are developments in both the life sciences and the social sciences that resonate with the cases and with the current exploration of WHM, and these will be considered in the later sections of this thesis. Recent

work in the plant sciences relates plant physiology to spheres of interest that had previously been restricted to animal and human sciences, namely behaviour and communication, raising questions as to how plant intelligence and agency should be considered. There are also signs of change in the social sciences, where the journey to posthumanism and various ontological turns have permitted the de-centring of the human to include plant-specific concepts such as 'plant thinking' and 'plants as persons'. These new ways of looking at the world resonate with the cases and with WHM.

In order to explore WHM a route has been chosen that starts with what has been absent from the limited research that has been carried out to date: the voices of herbalists themselves. The backbone of the research is a narrative approach to gathering interview data, namely that found in the biographic narrative interpretative method (Wengraf, 2001, 2012) that allows the subjects to tell their stories without interruption. This minimalist-passive approach to interviewing reduces the likelihood of the researcher missing elements and themes that are important to the subjects. Without this method it is unlikely that the research question, that seeks to understand how herbalists early beginnings, or 'entryways', relate to the rest of their narratives and to WHM, would have been arrived at. Ethnographic methods were also used to provide both background information and substantive descriptions, particularly of consultations. The research is then presented as selected cases of individual herbalists.

The thesis starts with a look at the fragmented history of WHM in the UK. It is fragmented because it has not had a clarified position within the academic field of the history of medicine, rather than because it has not been persistent, if marginal, as a practice. Next, we will turn to the political history of WHM in the UK, which looks at the profession's fight for survival and recognition, before exploring the profession's engagement with science. The limited social science research on WHM is then critically reviewed before the current methodology is described. The reasons for herbalists being drawn towards studying and practicing herbal medicine are then described, with some herbalists having 'visible

entryways' that are congruent with the background sections of this thesis. This is contrasted with the 'hidden entryway' herbalists, who had various crossings with plants, often at a young age, including being 'called' by plants. There is then an exploration of the conceptual orientations for the thesis. The starting point for this is Max Weber and his arguments about the disenchantment of the modern world. Bruno Latour, David Abram, Bronislaw Szerszynski and Jane Bennett are then drawn on to suggest that enchantment is alive and well in the modern world, including in WHM. The cases are then presented, first the visible entryway herbalists and then the hidden entryway herbalists. Each case is first made up predominantly of the herbalist's own words, followed by a reflective analytical section. After the cases have been completed, the thesis looks beyond the cases, comparing them to social science research as well as the history of WHM and the profession's engagement with science. Next, the cases are used to do theoretical work by relating them to WHM. Finally, we look to recent developments in plant sciences and in the social sciences, where there is work that resonates with the cases and with WHM, in order to suggest possible future associations.

CHAPTER 2: A FRAGMENTED HISTORY OF WESTERN HERBAL MEDICINE

At the very least, the history of herbal medicine as orthodox and unorthodox medicine has a long history. Tobyn *et al.* (2010) have recently traced the trajectory of WHM along its historical textual sources. This journey starts with the classical medicine of Dioscorides, Pliny and Galen in the first two centuries A.D. and its fertilization of Arabic medicine and then moves to Anglo Saxon and late Middle Ages texts including those of Hildegard von Bingen and the Physicians of Myddfai. The Renaissance and early modern period brought the 'Herbals' (texts that describe herbs and their medicinal properties) of Leonhart Fuchs, William Turner, John Gerard, John Parkinson and Nicholas Culpeper before the Anglo-American connection was cemented in the works of Cook, Ellingwood and Coffin in the 19th Century. Notable 20th and 21st century texts include those by Maud Grieve, A.W. Priest and L.R. Priest and Thomas Bartram, that then drew more and more heavily on scientific sources and approaches in the work of Rudolf Weiss, Elizabeth Williamson, David Hoffman, and Simon Mills and Kerry Bone as well as organizations such as the German Commission E, European Scientific Cooperation on Phytotherapy (ESCOP) and the British Herbal Medicine Association (BHMA).

Historians mostly treat herbs like any other object in the hands of the physician. Even those historians who are also herbal practitioners, such as Tobyn *et al.* (2010) and Barker (2007), are keen to place those who prescribe herbs as medicines within the history of physicians and medicine in general. What makes this history distinctively 'herbal' is rarely considered. This thesis will argue that herbs may be more agentive than that. Additionally, while the herbs are often silent in the fragmented histories, the herbalists are also unheard, unless they have authored Herbals. This thesis will argue that herbalists, like their herbs, are often more agentive than that in shaping contemporary WHM.

Stobart and Francia (2014) suggest that the history of herbal medicine lacks a coherent identity with much relevant scholarly research being hidden from view. With the exception of the broad overview of Griggs

(1982, 1997), Stobart and Francia point out that the development of WHM in the context of the rise of modern medicine after 1800 has not been considered.

The history of herbs as orthodox medicines before drug medicines and of herbs as herbal medicines after drug medicines has not developed sufficient momentum to become a sub-discipline within the history of medicine. Recently there have been attempts to remedy this, particularly by the establishment of the Herbal History Research Network.

Of course, herbs as medicine are to be found within diverse written histories of medicine, but they are scattered, not foregrounded and have not generally gathered those around them who identify as scholars of the history of WHM. And most of those scholars that may self-identify as such, for example, MacLennan and Pendry (2011), Pitman (2006, 2013), Toby *et al.* (2010), Barker (2007) and Stobart (2014) are also herbal practitioners, mostly outside academic history of medicine departments, seeking to understand the history of WHM partly to inform their and other herbalists' practices.

Francia and Stobart (2014) point out that the historiography of herbal medicine suggests that in medieval and early modern times writers emphasized the status and lineage of medical knowledge, while with the success of modern medicine in the 19th Century, descriptions shifted towards locations within antiquarian and folklore studies and that by the 20th Century herbal medicine had come to be seen as part of alternative or folk medicine or 'quackery'. Thus there was a movement of writings on herbal medicine from one being concerned with medical lineages, practice and status to one being concerned with herbs as tools (often negatively conceived) of cultural activities, outside the perimeter of true medical knowledge.

Orthodox and herbal medicine: a long goodbye

Identifying when orthodox and herbal practice separated is a tricky business. MacLennan and Pendry (2011) argue that despite herbs being prescribed by orthodox medics well into the 1900s, the separation of herbs from orthodoxy had already begun by the time that the staunch

supporter of herbal medicine, Henry VIII, came to power. This was largely due to the influence of Arabic practices on medical thinking, with the later development of an educated medical elite as well as regulatory legislation, cementing this separation. On the other hand, the editor of 'A Modern Herbal' (Grieve, 1996 [1931]) suggests that 'botany and medicine came down the ages hand in hand and then parted company in the seventeenth century' (xiii). Taking another leap through time, Williamson (2014) argues that the history of herbal medicine is, up until the 18th Century at least, largely the history of medicine itself. And Guthrie (1961), a surgeon, medical historian and member of the Botanical Society of Edinburgh, locates the date very specifically as 1961:

'The age-old alliance between Botany and Medicine has come to an end this year. No longer will the first-year medical student rush sleepily to the Botanic Gardens Lecture Hall in order to be in his seat by 8 a.m. when Professor Bayley Balfour will arrive and lock the door behind him.....Anatomy still remains the basic foundation of Surgery, but Botany is not now the basis of medicine, as it was for many centuries' (p184).

The wide variations of these dates, from Henry VIII in the mid sixteenth century, to 1961, suggest two things: that the separation of orthodox practice from herbal practice was indeed a process, rather than a moment, and that medicine has to varying extents always been about pluralism. Beyond a few instances of NHS and private 'integrated' healthcare, such as the Royal London Hospital for Integrated Medicine, or medical doctors prescribing herbal medicines in private practice, contemporary orthodox practice and the practice of WHM are today separate entities.

Herbalists defined by their medicines

Although there is little historical research into British herbalists, in a rare paper, Brown (1985) has looked at the period from the last quarter of the

19th Century to the early years after WWII, and argues that herbalists in Britain were defined by two factors. Firstly, they rejected inorganic medicines, only using 'vegetable substances' in the belief that it was remedies from this kingdom that operated in harmony with the simple laws of nature. 'Poisonous' medicines were avoided. WH Webb (1916), in the foreword to his 'Standard Guide to Non-Poisonous Herbal Medicine', argues that 'As the true Herbalist rejects the inorganic substance from his store of remedial agents, so does he, and with equal persistence, reject the poisonous, life-destroying drug...' (pxv). The remedies were either whole plant materials or simple extracts, likely being emphasized in direct opposition to the 'regular' practitioners who were increasingly isolating 'active principles' through chemical methods. For example, Harry Orbell wrote in 1939, that 'when some active principles of herbs are used separately their therapeutic action is totally different to that obtained when the whole of the properties of the plant in question are employed' (Brown, 1985, p77). Taking the example of Lobelia, Scott (1915) explains that 'Lobelia inflata, so freely used by botanic doctors, contains an alkali which is poison, Lobelina, but it also contains an acid which destroys its poisonous property; and the two properties, as combined in the plant, form a medicine which is harmless, and yet powerful in rooting out disease' (cited in Brown, 1985, p77).

British herbal medicine in harmony with nature and with America

As well as these herbalists being defined by the safe, whole plant medicines that they used, they also believed that it was the driving force of Nature that kept people healthy as long as the Laws of Nature were obeyed. As such therapeutic endeavors must aid the processes of Nature and the 'vital force'.

This emphasis on the 'vital force' was partly due to the American influence of Samuel Thomson on British herbalists, who argued that his medicines 'harmonized with the law of life' (Brown, 1985, p80).

Barker (2007) describes how Thomson (1769 – 1843) based his system of therapeutics on the idea that all illness came from cold. Heat was seen as being synonymous with the 'vital force'. 'Heat is life, cold is death.'

Healing required using vapor baths and hot water plus the removal of toxins via sweat, purging and emesis. While 'heroic' by today's standards his methods were reportedly successful in treating commonly fatal infectious diseases such as typhoid fever, influenza, yellow fever, diphtheria, measles, whooping cough and malaria. The best known of Thomson's formulae, 'Composition Powder (formula number 2)', increased vital heat and was used widely for influenza, dysentery and gastrointestinal pain and included barberry bark, hemlock inner bark, ginger, cayenne and cloves (Winston and Dattner, 1999). These treatments were gentler than the bleeding and toxic heavy metal medicines of the orthodox medicine of the time. Thomson sold 'patents' of his system to those who then practiced it, and became a very wealthy man. Caldecott (2008) shows how Thomson attracted young intellectuals like Alva Curtis to his approach. However, while Curtis was drawn to the simplicity of Thomson's system he was additionally interested in the latest medical discoveries of the day. This was too much for Thomson who had anti-intellectualism at heart and eventually a 'New Light' Thomsonianism, later to be called 'Physiomedicalism' was born, with Alva Curtis and William Cook establishing training institutions. The scientific discoveries that were particularly taken on board were the autonomic nervous system and understandings of the blood circulation. Physiomedicalism developed a complex theoretical knowledge to underpin their practice, part of which included an energetic diagnostic system similar to the yin and yang of Chinese medicine (Winston and Dattner, 1999). Thus patients were seen as either Asthenic – deficient and underactive, or Sthenic – excess and hyperactive, with herbs prescribed based on physical examination that included pulse and tongue diagnosis. Caldecott (2008) notes that Alva Curtis translated Thomson's understanding of hot and cold into more scientific terms, such that interference with the vital force could be seen as either 'over-contraction' or 'over-relaxation'. William Cook (1998 [1869]) applied knowledge of the autonomic nervous system, with 'irritation' being a sympathetic response leading to 'contraction', and 'depression' being a parasympathetic response leading to 'relaxation'. JM Thurston (1900)

developed Cook's ideas in his 'Philosophy of Physiomedicalism'. Wood (2002) describes Thurston's understanding of various 'tissue states' of the body along with their treatment. Thus 'irritation' requires plants to reduce heat, 'constriction' requires antispasmodics, 'atrophy' requires trophorestoration, 'relaxation' requires astringents, 'stagnation' requires blood purification and 'depression' requires warming stimulants. Central to Physiomedicalism was the key concept of the 'vital force' i.e. the belief that every living system is maintained by this force, with disease being due to its disruption (Caldecott, 2008; Menzies-Trull, 2003). According to British Physiomedicalists Priest and Priest (1983) 'the vital force is always resistive, eliminative and reconstructive in intent' (p1) - referring to what can now be seen as the immune, eliminative and repair functions of the body. Particularly key was the promotion of the organs of elimination i.e. the bowels, lungs, kidneys and skin, and the encouragement of 'alterative' activity via elimination and digestive function. Further emphasis was on 'equalizing the circulation' - ensuring arteries, veins and capillaries are working well in relationship, as well as promoting 'trophorestoration' - i.e. restoring function to organs and tissues with herbs that have particular affinities for them (Caldecott, 2008; Menzies-Trull, 2003).

American herbal medicine came to Britain with Dr. Albert Coffin in 1838 (Shelley, 2014a). He had been successfully treated by an Indian woman in America for a serious lung condition, which set him on his journey to becoming a Doctor. He settled in England, and brought his herbal medicines and Journals of Self-help to the industrial North, particularly to Yorkshire, Lancashire and the Potteries and was reportedly successful, especially in treating infectious diseases like cholera (Denham, 1994). He travelled widely in England, teaching 'Medical Botany' and appointing 'agents' to sell his remedies, books and journals. He set up various 'medico-botanical' societies, particularly in the North, where he had a following amongst the temperance and non-conformist movements. He was said to have successfully treated a cholera epidemic in 1849 using Samuel Thomson's approach that included oak bark, cayenne, raspberry leaves and lobelia (Shelley, 2014a). The success of 'medical botany' can

partly be attributed to its uptake by those who were witheringly opposed to orthodox medicine and to the growth of 'self-help' approaches to healthcare (Moffitt, 1986). Brown (1982) shows how Englishmen, including John Stevens, John Skelton, Joseph Nadin and William Fox also brought American Thomsonian practices to England, which retained an 'intense antagonism towards the medical establishment' (p409). British herbalists also identified with American counterparts due the professional status that the derivatives of Thomsonian medicine enjoyed in the States, namely the Physiomedical and Eclectic medical traditions (Brown, 1985). British herbalists travelled to America to exchange information, contributing to the use of Native American plants in the British materia medica (Shelley, 2014b).

CHAPTER 3: A POLITICAL HISTORY OF THE PROFESSION

As noted above, until modern times the history of herbal medicine was in many ways the history of medicine itself (Stobart and Francia, 2014; McIntyre, 2005; Tobyn *et al.*, 2010). McIntyre (2005) points out that the Herbals of Dioscorides and Galen were the major European medical sources for over 12 centuries, which were then taken up by Arabic culture and eventually fed back into Western Christian medicine.

Medicinal herbs were often grown in walled gardens of the medieval monasteries and often given the species name of '*officinalis*', meaning the official medicinal species.

However, by the end of the medieval period, English herbalists, who had no officially sanctioned position in the various institutions of medicine, were given protection by Henry VIII, in what became known as the 'Herbalists Charter' of 1542. Footler (2015) reveals the words of the Charter:

'...it shall be lawful to every Person being the King's subject, having knowledge and Experience of the Nature of Herbs, Roots and Waters, or of the Operation of the same, by Speculation or Practice, within any part of the Realm of England, or within any other the King's Dominions, to practice, use and minister in and to any outward Sore, Uncome Wound, Apostermations, outward Swelling or Disease, any Herb or Herbs, Ointments, Baths, Pultess, and Emplaisters, according to their Cunning Experience and Knowledge in any of the Diseases, Sores and Maladies foresaid, and all other like to the same, or Drinks for the Stone, Stranguary or Agues, without suit, vexation, trouble, penalty or loss of their goods.'

Despite this support, the Charter provided no legal definition of who someone 'having knowledge and Experience of the Nature of Herbs' might be. This lack of definition continues to this day. The resulting uncertainty for herbalists can be seen in the political history of the profession of WHM. While herbalists' individual voices, other than those who have authored texts, have rarely been heard in either the history of medicine or in other academic disciplines, the profession of herbal

medicine is more visible and has responded to its predicament. This will be considered below.

Herbalists in search of a (consulting) room of one's own

With this background we now turn to look at developments, from the mid 19th Century to the present day, of the profession of WHM in the UK, as a marginalized alternative medical practice.

Saks (2002a) locates the formal creation of alternative medicine with the passing of the 1858 Medical Act, which gave medical doctors protection of title and the ability to self govern via the General Medical Council that was established in the same year. Prior to this date, from the 16th century, while there were limited monopolies such as those established with the Royal College of Physicians, the Society of Apothecaries and the Royal College of Surgeons, there was a relatively open entrepreneurial contest between the different purveyors of health that included herbalists, bonesetters, healers and those seeking to sell their proprietary medicines. Thus, Saks (2002a) sees the 1858 Act as pushing non-orthodox practitioners, including herbalists, to the margins of legitimacy. One swift response to this was a meeting, also in 1858, of nationwide Medico-Botanic practitioners in Manchester that formed the British Medico Botanic Society (Shelley, 2014a). This was to be the foundation for the National Association of Medical Herbalists, initially known as the British Medical Reform Association, which was established in 1864 in Shirley's Temperance Hotel in London and later became the National Institute of Medical Herbalists in 1945 (Shelley, 2014a).

In 1885 there was an attempt to include the much-favoured 'Thomsonian' remedy of Lobelia on the Poisons Schedule. However this was successfully resisted by the NAMH. In 1886, an amendment to the Medical Act of 1858 was proposed that would make it illegal to practice medicine unless a medically qualified doctor. However, herbalists successfully campaigned against this Bill (McIntyre, 2005).

The recognition of the need for formal training led to a series of short-lived training institutions in the North, including in Leeds, Rochdale and Southport. The Metropolitan Medico-Botanic College was opened in

London in 1891 although it is unclear how long it existed, and in 1931 the NAMH opened its College of Botanic Medicine in London, which closed in 1940 (Shelley, 2014a).

In 1894 the Medical Herbalists Defense Union was established to defend herbalists from attacks by the allopathic establishment. In 1895 the NAMH was registered as a limited company, with all its subscribers being from the north of England. The NAMH amalgamated with the United Society of Herbalists and Midland Botanic Society and formed alliances with other organizations in order to have a more powerful voice in the representation of medical herbalists (Shelley, 2014). Its memorandum of association was codified and sought to demarcate qualified from unqualified practitioners and to 'repress malpractice' through a General Council on Safe Medicines (Brown, 1985).

In 1901 NAMH sub-committees were formed: a publishing sub-committee; an examinations sub-committee that oversaw the exams that all prospective members had to pass; a school sub-committee to oversee training curricula; and a Parliamentary sub-committee to lobby for state recognition of medical herbalists.

Fred Fletcher-Hyde, a past president of NIMH, who held two degrees, one in chemistry and another in botany, and who completed the NIMH tutorial course in 1941, reports that between 1901 and 1922 herbalists tried for registration three times – a Private Members Bill, a Charter of Royal Incorporation in 1907 and a 1922 Medical Herbalists (Registration) Bill, but none of these attempts were successful (Robbins, 1994).

In 1902 William Henry Webb and his wife Dr Sarah Webb, who had qualified as a Physiomedical doctor in America, started the School of Herbal Medicine in Southport, drawing American lecturers to teach on its four-year course. It was referred to by the NAMH as 'The Botanic Sanatorium and Training School of the NAMH of GB Ltd' (Shelley, 2014a).

In 1911 the National Health Insurance Bill was passed into law, which required insured persons to register with one of a panel of medical practitioners. Initially, the selection of medical practitioners was left in the hands of the local insurance committees. However, Insurance Act

regulations subsequently made it clear that these practitioners could not include herbalists (Brown 1985). In the NAMH's 1911 Secretary's report it was stated that 'The most serious thing which has happened to affect Herbalists is the National Insurance Bill. The handing over to the absolute mercy of the allopaths of about fifteen millions of people, without any appeal against their decision, is a most serious matter' (Shelley, 2014a, p10).

In lobbying for a Medical Herbalists Bill in the early 20th Century the NAMH argued that 'it is our desire to compel a standard of Education and Regulation so that the public can differentiate between Bone Fide herbalists and those who trade on the name' (Griggs, 1997, p262). Over 130 MPs signed up to this 1923 Private Members Bill, which enjoyed an unopposed first reading. However, the government refused to make time for the Bill to progress, which McIntyre (2005) notes is unsurprising given the comment of the Chief Medical Officer, Sir George Newman, that 'it is doubtful whether a trained herbalist is any less dangerous than an untrained one' (p133).

In 1941 a new Pharmacy and Medicines Act withdrew the rights of herbalists to supply herbal remedies to patients on the grounds of public safety. While herbalists could still diagnose, give advice and prescribe they could no longer dispense, effectively making it illegal to practice. However, many herbalists did continue to dispense herbal medicines to their patients (Griggs, 1997). Fred Fletcher-Hyde reports that while some prosecutions were brought against herbalists 'no jury would convict so the matter was dropped. Like other herbalists I felt I was not breaking the law but merely using the herbs God provided to heal the ills of mankind. We were practising under a form of Divine Principle' (Robbins, 1994, p31).

When the NHS was launched by Aneurin Bevan in 1945, herbalists initially sought inclusion. However, Bevan said that herbalists could be incorporated only if subordinate to the medical profession. Herbalists chose to stay outside the NHS rather than lose their independence (McIntyre, 2011).

In 1948 the NIMH and the Hospital for Natural Healing in East London founded the School of Herbal Medicine, offering clinical training similar to orthodox hospital outpatient departments (Shelley, 2014a).

Saks (2002a; 2002b) notes that the counter cultural movements of the 1960s and 1970s contributed to the popular critical engagement with orthodox medicine, motivated partly by drug safety scares as well as a desire for increased patient choice. This was reflected in the political popularity of such authors as Ivan Illich (2001 [1975]) who argued that the medicalization of life often added to burdens of ill health, rather than relieved them. During this time there was an undoubtedly related increase in demand for alternatives to conventional medicine. However, the medical establishment continued to defend its territory, arguing that only medical doctors should be able to practice alternative medicine, particularly homeopathy and acupuncture. However, there was growing political support for CAM within Parliament, and Royal support from Prince Charles, who eventually established the Prince's Foundation for Integrated Health in 1993.

The particular drug tragedy that impacted most on herbalists was the thalidomide tragedy of the early 1960s. The resulting iatrogenic deformities led to a public and political outcry over the lack of appropriate drug safety measures. The government rushed in legislation that addressed drug testing and licensing. McIntyre (2005) notes that herbal medicines were caught in the middle of this and would be licensed in the same way as drugs. Furthermore Fred Fletcher-Hyde noted that the legislation would have meant that consultations with herbalists could only take place at the same location as herbal medicines were manufactured and that there were no provisions for tinctures, creams and ointments, saying that 'This would have closed us down' (Robbins, 1994, p31). This led to a huge response by the public and herbalists alike, with thousands of letters written to MPs by patients, and hundreds by herbalists, arguing for the public right to choose herbal medicines and to consult herbalists. Amongst others it was the energetic political work of Fred Fletcher-Hyde that helped secure the exemptions to the Act. He remembers that "In the Lords, I was so familiar a sight that often when

visiting the chamber I would be greeted by the various staff as, 'M'lud" (Robbins, 1994, p32).

This work paid off and Fred Fletcher-Hyde notes that many of the MPs 'had not received so many letters on any issue since Mr Enoch Powell's racist statements' (Robbins, 1994, p31). The result was that when the 1968 Medicines Act was passed into law it carried special provisions. These exemptions were Section 12.1 and 12.2. Section 12.1 specified an exemption for herbal medicines from licensing provided that they are supplied following a one-to-one consultation. Section 12.2 exempted herbal medicines provided that they are produced according to standard traditional, non-industrial methods and for which no written claims are made. Barker (2007) notes that the law implicitly separated the consulting herbalist from the retailing herbalist.

However, critically and similarly to Henry VIII's 'Herbalists Charter', it did not set out any professional definitions of what or who a herbal practitioner is. McIntyre (2005) reveals that Fred Fletcher-Hyde later recalled that, when he requested that the term 'herbalist' should be defined, was told that the definition would be provided after consultation with the pharmacists and doctors. Realizing that this was likely to lead to damaging restrictions, he avoided mentioning the subject again and the term 'herbalist' remains undefined to this day.

Following the 1968 Act, similarly to Henry VIII's Herbalists Charter of 1543, anyone could call themselves a herbalist.

After 1968, herbal practices and training schools grew in line with what came to be seen as an increasing crisis in modern medicine, including its paternalism, lack of humanism and reductionism. This arguably arose out of modernization that included urbanization and globalization (Cant and Sharma, 1999). Thus it is possible to see the 'revival' of herbal medicine as tapping into environmental concerns (Wahlberg, 2010). Indeed, HM is often seen as the 'greenest' of medicines, with a supply chain that starts in the soil, and is reflected in the disposition of many herbalists.

In 1991 the NIMH introduced a binding code of ethics and disciplinary procedures. In 1994 the NIMH established an accreditation board to assess training standards and in the same year the University of

Middlesex took its first intake of students for a BSc degree in herbal medicine. By the beginning of the new millennium, herbal medicine was considered one of the 'big five' CAM practices and was to become a candidate for regulation (Wahlberg, 2010).

The House of Lords (2000) Select Committee on Science and Technology was ordered to report to Parliament on CAM in the UK, and published its report in November 2000. Saks (2002a) notes that the authors used a tripartite system to categorize alternative medicines into a hierarchy. The first group had their own diagnostic approaches, organized practitioners and a credible evidence base. Herbal medicine was in this group, along with osteopathy, chiropractic, homeopathy and acupuncture. The second group was said to complement orthodox medicine and as such did not have therapy specific diagnostic skills. This group included aromatherapy, hypnotherapy, massage and reflexology. The third group was identified as having very different philosophical principles when compared with conventional medicine and included radionics, iridology and, incongruously, given acupuncture's placement in the first group, Traditional Chinese Medicine (TCM). The report identified herbal medicine and acupuncture as being suitable for state regulation - the state licensing of practitioners to practice on the basis of their training and compliance with continuing professional development - due to the existence of a credible evidence base, consensus among practitioners to move forward to statutory regulation, well organized professional associations and a risk to the public if practitioners are unqualified. Subsequently, two Department of Health working groups have made proposals for the statutory regulation of the herbal medicine profession as a whole, which includes Western Herbal Medicine, Chinese Herbal Medicine, Ayurveda and Tibetan herbal medicine. About 800 of these 1500 herbalists practice WHM.

These reports have looked at how a self-regulating council could be given the legal right to establish minimum levels of competence, ethical practice and disciplinary regulations (Wahlberg, 2010). The regulating authority that has been suggested is the independent regulator the Health and Care Professions Council (HCPC). In 2011 the Health

Secretary, Andrew Lansley, backed the statutory regulation of herbalists. However, since then, progress became slow for a number of reasons, including a perception by the European Commission that the UK government, by granting statutory regulation, was seeking to avoid European medicines legislation in order to allow access of herbalists to unlicensed herbal medicines that had been removed from the market by European herbal medicines legislation, namely the Traditional Herbal Medicinal Products Directive (McIntyre, 2013). Herbalists' representatives were given governmental reassurance that registration remains a government objective. However, at the time of writing, a third working party report (Walker, 2015) has recommended voluntary self-regulation over statutory registration.

Despite the historical desire for political recognition that continues to this day, there is a linked but more immediate threat to herbal practice in the UK that comes in the shape of EU legislation. As a member of the EU, Britain is subject to EU objectives of harmonization, including in healthcare. The EU's legal basis is in Napoleonic Law, requiring specific legislation to allow CAM practitioners to practice medicine. This can be at variance with UK Common Law, where historically practices have been legal unless prohibited by law. Anticipating such conflicts and how they may affect herbal medicine in the UK, in 1993 the EHPA (European Herbal Practitioners Association), later to become the EHTPA (European Herbal and Traditional Medicine Practitioners Association), was established as an umbrella organization of professional associations to address these issues and how they affect herbal practice.

In October 2005 the EU Traditional Herbal Medicinal Products Directive 2001/83/EC (THMPD) came into effect, albeit with a 7 year transitional period, requiring Section 12.2 products from the 1968 Medicines Act to be registered herbal medicines that have to meet specific standards of safety and quality and be accompanied by indications and patient information. In the UK, responsibility for these assurances rests with the Medicines and Healthcare Products Regulatory Agency (MHRA). The EU THMPD replaced section 12.2 of the 1968 Medicines Act, which had permitted 'finished herbal products' to be supplied to patients by a third

party. With the loss of Section 12.2, herbalists may only supply herbal medicines that have not been 'industrially produced' i.e. that have been prepared by herbalists on their own premises, as laid out in 12.1 of the 1968 Medicines Act. However, this legislation affects WHM practitioners less than other traditions because, in WHM, it is mostly 'non-industrially produced' medicines that are used anyway, namely dried herbs and tinctures, that are made up by the practitioner for the individual patient. This is compared with Chinese Herbal Medicine where proprietary formulae are often also used. However, it has affected practitioners of WHM who use a 3rd party 'prescription service' for their patients, although these practitioners are likely to be relatively small in number.

This situation has added impetus to those who seek political recognition because statutory regulation would mean that herbalists, in EU law, would be 'authorized health professionals' and would be permitted to seek third parties to make herbal products and dispense on their behalf. At the time of writing, as mentioned above, the UK government has recently produced a further working group report (Walker, 2015) that makes a U-turn in that statutory regulation is not recommended, claiming an insufficient evidence base. Instead, a system of voluntary self-regulation is proposed. How this protects the long-term access of herbalists to their medicines is unclear. Professional organizations are currently considering how to respond.

From the above it can be seen that herbalists, since the inception of what would become the NIMH, have had to organize politically in order to maintain their abilities to practice. While herbalists are by no means unanimous in their desire for Statutory Regulation - as Michael McIntyre points out 'Herbalists of all persuasions are generally skeptical of 'Big Brother' and jealously guard their professional independence' (McIntyre, 2011, p30) - professional organizations have been vocal and active in their desire to see the distinction between 'bona fide' practitioners and unqualified practitioners enshrined in law in order to give their members legal recognition in a rapidly changing world.

Western Herbal Medicine hidden by CAM, and herbs hidden by politics

The political organization of the profession has made WHM more visible, extending public awareness of WHM beyond herbalists and their patients. However, the politicization of WHM has arguably made herbalists' tools, namely herbs as medicines, less visible. The reasons for this are now discussed.

WHM in the UK, where it is discussed, is often found in both academic and popular debates on 'Complementary and Alternative Medicine' (CAM), with 'CAM' used as an umbrella term to define all therapies that are outside orthodox medicine. One of the consequences of using this umbrella term is that the specificities of individual therapies become less visible. CAM becomes a unifying category and an object of enquiry in its own right. In the political sphere the component parts of CAM and their meanings can remain hidden. Although plenty of discussions as to what separates orthodox medicine from CAM are to be found (e.g. Fulder, 1996), this will not be pursued here. Rather, the focus is on how governmental attention to the 'field of CAM' means that once an alternative medicine is seen as having the pre-requisites for regulation, the specificities of it as a medical system are positioned outside the concern of regulators. Such is the case for WHM.

Wahlberg (2007) has shown that the rapid development of CAM in the UK since the 1980s may be contrasted with early 20th century implementation of 'strategies of marginalization, subordination and exclusion' by orthodox medicine against non-orthodox practices.

Wahlberg analyses CAM as a Foucauldian 'field of problematization' and argues that instead of restricting access to non-orthodox practices, as was done in the past, it is 'responsible' practice that is encouraged through the 'normalization' of practice. He describes how, over the last three centuries the battle-ground of who is a recognized practitioner has shifted from the commercial field of miracle cures (in the 18th and 19th centuries), to competing theories of health (in the late 19th and early 20th centuries), to the situation today, where it is practitioner qualifications,

competency, responsibility, conduct and development that constitute an 'ethical field of battle'.

From this perspective practitioners become competent partly by their organization into associations of practitioners as well as the unification of these associations. This is certainly true for herbal medicine in general and WHM in particular. Of the 1500 or so listed herbalists, about 800 are practitioners of WHM, with the remaining being mostly Chinese Herbal Medicine practitioners, with some Ayurvedic and a small number of Tibetan practitioners. Of the 11 professional bodies representing these 1500 herbalists, 4 of them represent 800 Western herbalists, with the NIMH representing about 500 herbalists. The professional bodies of WHM are generally well organized, with established codes of conduct and disciplinary procedures. The four WHM professional bodies, along with their Chinese Medicine, Ayurvedic and Tibetan colleagues, came together under the umbrella of the EHPA (European Herbal Practitioners Association, later the EHTPA) partly to negotiate with the government over statutory regulation.

Wahlberg (2007) argues that, beyond organizing and unifying themselves, competency can be further advanced by defining the qualifications and skills of herbalists. Thus the Herbal Medicine Regulatory Working Group (2003), set up by the EHTPA, Prince of Wales Foundation for Integrated Health (PWFH) and the Department of Health in 2001, has suggested procedures to protect patients and public from unfit practitioners.

Professional bodies have engaged with these concerns. The NIMH requires that new members must have a BSc degree in herbal medicine, comply with the Memorandum and Articles of Association, codes of ethics, practice and disciplinary procedures, including health and fitness to practice, and must be of 'good character'.

Interestingly the NIMH code of ethics (National Institute of Medical Herbalists, 2015a) and practice could very nearly be taken up as it is and applied to other therapies. Apart from saying that members must keep up with developments in herbal medicine, there is barely any mention of herbal medicine in the entire document that covers the member's

obligation to her patients, ethical/professional boundaries, legal obligations and good practice, commercial obligations, obligations in practice, relationships with professional colleagues and obligation as a teacher.

Furthermore, the continuing professional development (CPD) requirements of the NIMH (National Institute of Medical Herbalists, 2015b) describe how herbalists must comply with CPD each year, keeping a record of what they did, what was learnt from it and what impact it had on their practice. The CPD scheme is based on reflective learning, with members identifying their own learning needs and how these are met. The CPD scheme could equally be taken up by any professional body of any discipline.

Even the long-established Oath (Affirmation of Herbal Practice) that new members of NIMH take, barely mentions herbs, suggesting that it is the skills rather than the tools that define the profession:

'I solemnly promise that I will keep this affirmation and this stipulation – to follow the profession of herbal medicine according to my ability and judgment, for the benefit of my patients and to abstain from all this is deleterious and mischievous I will give no deadly medicine to anyone if asked, nor suggest such counsel.

With purity and holiness will I pass my life and practise my art. Into whatever houses I enter I will go into them for the benefit of the sick and will abstain from any voluntary act of mischief or corruption.

Whatever in connection with my professional practice or not in connection with it, I see or hear in the life of any person, which ought not to be spoken of abroad, I will not divulge as reckoning all such should be kept secret.

While I continue to keep this affirmation inviolate may it be granted to me to enjoy life and the practice of herbal medicine, respected by all persons and all times.'

Should WHM eventually be granted Statutory Regulation, it is likely that the 'Health and Care Professions Council' (HCPC) would be the legal regulating agency. If we look at the HCPC's 'standards for prescribing', which sets out the knowledge and skills a practitioner should be able to demonstrate, and which WHM would also be covered by, it is clear that

what is prescribed is not the focus. Thus, knowledge of pharmacodynamics, pharmacokinetics, pharmacology and 'therapeutics relevant to prescribing practice' is required, along with making a 'prescribing decision based on relevant physical examination, assessment and history' (Health and Care Professions Council, 2015). Herbs would be treated like any other therapeutic substance. If WHM is not to be regulated by statute, then it is likely to be recommended that the Professional Standards Authority (PSA) set the standards for a voluntary register of herbalists (Walker, 2015). Similarly to the HCPC, the PSA's Standards for Accredited Registers (Professional Standards Authority, 2015) do not reveal a concern with the specific tools of any particular therapy.

Thus, as Wahlberg (2007) suggests, the 'problem of quackery is increasingly located in an ethical field of practitioner competency, qualifications, conduct, responsibility and personal professional development, almost (but not quite) regardless of the form of therapy in question' (p2307).

In the case of WHM, the generic nature of the standards taken on by governing bodies and potential regulators means that the herbs themselves are invisible in the political regulation of unified and competent herbalists. Instead, herbalists are visible as a cultural phenomenon in need of some form of political regulation.

CHAPTER 4: THE PROFESSION AND SCIENCE

We have seen how the profession of herbal medicine has acted politically to protect itself, and how the regulatory impulse analytically separates the herbal profession from their herbs, replacing it with skills and competencies. We will now look at how the profession has become increasingly allied with science, with herbs becoming an object of scientific investigation.

Brown (1985) notes that, as far back as the end of the 19th Century, herbalists aspiring to professional status 'needed to dispel some elements of their traditional image. First it had become necessary to purge herbalism of association with astrology' (p81), with the term 'Culpeperism' being used to belittle and distance authors from the astrological aspect of Nicholas Culpeper's seventeenth century work that was still influential two centuries on.

Brown also highlights the embarrassment caused in the 1920s and 1930s by the image of the herbalist as a disreputable stallholder or someone who works in a dark, dusty shop decorated with the trappings of apothecaries. Herbalists saw attending to the sick to be a superior calling to the retail supply of herbal medicines. This view remains prevalent in more recent times. For a decade from the late 1980s, in a continuing attempt to separate the professional consulting medical herbalist from the health shop supply of herbs, the NIMH had a requirement that its members should have a separate entrance for their patients that was not via a shop. Just at the time when Chinese Medicine, which included the use of herbs, was opening its shop doors to passers by on the high street, Western herbalists were shutting some of theirs. Although the number of herbalists who had shops was probably small, the requirement of separate doorways is reflective of the continuing concern of professional bodies to be aligned with the professionalism of orthodox medicine.

Journals

The possession of specialized knowledge is key for any group's claim to be a profession. Brown (1985) points out that at the start of the 20th

century, texts on materia medica were not written by contemporary herbalists but relied on 'out of date' sources. In response the NAMH issued an up-dated National Botanic Pharmacopeia in 1905, the second edition of which, produced in 1921, had all 'poisonous remedies' removed (Tobyn *et al.*, 2010). Students and practitioners had other difficulties: in the 1880s the only British works recommended to students were by Skelton and even Webb's Standard Guide to Non-Poisonous Herbal Medicines (1916) was reliant on American material. While the NAMH purchased the rights to Skelton's 'Science and Practice of Herbal Medicine' in 1904 the text was 34 years old by the time students read it as course material. Brown reports one herbalist who said in 1929 that 'We are sadly deficient in published works. We have none written by men of authority possessing British medical and scientific qualifications...' (cited in Brown, 1985, p83).

One way of generating specialized knowledge is through research. Brown shows that herbalists at the beginning of the 20th Century were aware of the importance of research to practice. Hence the NAMH awarded a medal for the best paper reporting original research at the annual conference.

Shelley (2014a) points out that in 1909 the NAMH council agreed to award a number of prizes for an essay on 'herbalism', giving 'a) its scientific (or best) definition, b) the best means of making it scientifically effectual in the prevention and cure of disease' (p10), with the purpose of giving these prizes being that herbalism may be seen as worthy of state recognition.

However, there were few opportunities for clinical research without holding medical qualifications. One way, however, to improve the scientific and professional status was through the publication of official journals. Thus the NAMH initially published 'The Botanic Practitioner', which was replaced by 'The Herbalist' in 1902 and by 'The Medical Herbalist' in 1925. Later, in 1938 'The Medical Herbalist' was combined with 'Health from Herbs' before 'The Herbal Practitioner' became the professional journal in 1940 (Brown, 1985).

The first issue of the British Journal of Phytotherapy (BJP) (1990) was published in 1990 by the College of Phytotherapy. Hein Zeylstra was both the principal of the College and editor-in-chief of its Journal. It was published quarterly or six-monthly until 2001. The first issue included a statement that the book 'Herbal Medicine' by Rudolf Weiss (1988) 'provides a good example of what phytotherapy stands for or should stand for....The text speaks for itself.' (p6). This issue then presents reproductions of the prefaces to the first and sixth editions of Weiss's text. In the first edition the preface states that 'a deliberate break has been made from the traditional approach still widely used today, which has its roots in history and folk medicine' (Weiss, 1988, cited in British Journal of Phytotherapy, 1990, p6). This journal, in its 11 year life, published pharmacological and phytochemical studies, literature reviews, monographs, clinical notes and case reports, herbal approaches to particular biomedical conditions and contemporary debates on phytotherapy. While traditional knowledge is referenced, it is rarely referenced alone when presenting information on particular herbs. Rather it is the evidence of science that is considered to be authoritative, with the traditional sources providing background. Whether it is Barley, Liquorice or Sage that is the focus, it is the pull of science that allows these articles to be published in this journal rather than the push of tradition.

The 'European Journal of Herbal Medicine' (EJHM) was published by the NIMH from 1994 to 2004, producing three issues per year. Its aim was to create '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' (European Journal of Herbal Medicine, 1994, p1). Compared with the BJP it included more papers on historical aspects of herbal medicines, with a section designated 'Traditions' that included considerations, for example, of the history of Scottish herbal medicine, Culpeper, Gerard, humoral medicine, Hildegard von Bingen, vitalism, folk medicine and Chelsea Physic Gardens. It also included more clinical notes than the BJP and the monographs presented generally contained more references to

traditional sources, although there were regular updates on 'research news'. In the first edition David St George argues that herbal and other CAM modalities should not seek to force themselves into the biomedical model but should 'be looking to the complementary therapies to help us gain insight into why and how orthodox medical science is limited' (St. George, 1994, p38).

In 2011 the NIMH launched their new journal, the Journal of Herbal Medicine (JHM), this time a peer reviewed Elsevier journal. The editorial of the first edition (Pendry, 2011) states that: 'To consolidate our future position as registered healthcare professionals and advance our profession it is vital to recognize that research is no longer an optional extra...research is an essential activity and we must underpin our practice with sound scientific evidence. As a profession, in addition to the generation of data on the individual actions of herbs, we need to focus on the creation of sound evidence that takes account of the individualized nature of herbal practice' (p1). No longer is it possible for the profession to survive simply by looking back to the wisdom of the past, but a scientific evidence base must be created in order to facilitate herbalists' anticipated future recognition by the State. While there are a handful of papers in this Journal that look at practitioner prescribing and experiences, thus investigating the 'individualized nature of herbal practice', the vast majority of papers are concerned with other aspects of WHM, including pre-clinical laboratory studies, the occasional clinical trial, reviews, monographs and historical and opinion pieces. For the JHM it is the indications from scientific studies that are emphasized, although traditional knowledge sources may often be seen as 'supporting' such evidence. Even though scientific evidence and traditional knowledge are often presented as mutually reinforcing, it is only science that can stand on its own: this is the nature of peer-reviewed scientific journals. In this sense, the JHM is more like the BJP and less like the EJHM, with clinical experience and tradition being less emphasized in the search for an objective knowledge that will satisfy science and regulators.

Pharmacopoeias

Treasure (2014), a herbalist and author, rehearses Kuhn's argument that science progresses non-linearly with crises or revolutions interrupting 'normal science'. Observations and data lead to a 'paradigm' of 'normal science'. Eventually, however, anomalous findings accumulate which are 'incommensurable' with the existing paradigm, leading to a crisis and the emergence of a new paradigm that can explain the anomalous findings. This is followed by another period of normal science. Applying such a framework to WHM, Treasure additionally brings in a modern web-based analogy. He sees WHM as having moved from 'Herbalism 1.0' to 'Herbalism 2.0'. Herbalism 1.0 is characterized by 'the Herbal'. In fact, 'The Herbal is the Paradigm'. The 'Herbal', authored by the expert practitioner, is an authoritative knowledge base of botanical remedies, pharmacy and therapeutics. He sees Dioscorides' 'De Materia Medica' as being the first authoritative herbal. Other Herbals central to the WHM tradition include those described by Tobyn *et al.* (2010) - Greco-Roman and Arabic Herbals such as those written by Galen and Avicenna; in the Middle Ages those written by Hildegard von Bingen and the Physicians of Myddfai; in the Renaissance and Early modern period those written by Paracelsus and Culpeper; and in 19th Century, those authored by Cook, Thurston, Ellingwood and Felter. Treasure argues that these 'expert practitioners express a specific conception of the nature of a herbal remedy' (p21), often in terms of 'virtues', where the herb is not defined by what it does, so much as what it has 'the power to do'.

Herbalism 2.0, on the other hand, was presaged by the period of crisis in the last decades of the 19th C and the first few decades of the 20th C, where there was an urgent need to legitimate herbal medicine in the face of a pharmaceutical industry that was closely aligned with a confident orthodox medical profession. Thus Treasure argues that the expert author and the Herbal have been replaced by the monograph, often presented in pharmacopoeias. 'Eminence based medicine was replaced by evidence based medicine' (p22), with monographs designed to oppose 'legal-regulatory initiatives intended to minimize the credibility and availability of herbal medicines' (p22). The monograph became

based on objective scientific data, even if there were variations in the monographs' focus on either more analytical or more therapeutic orientations. While Herbals considered the virtues of herbs, monographs revealed the actions of herbs based on reductionist science.

The British Herbal Medicine Association (BHMA), an interest group of retailers, manufacturers and herbalists, was established in 1964 to address regulatory controls on herbal medicines. Part of its response was to create a pharmacopoeia-based record of plant monographs in use by medical herbalists. The publishing of The British Herbal Pharmacopoeia (BHP) began in the 70s, and was motivated partly by the recognition that the 1968 Act was only a stop gap, with the absence of a legal definition of a herbalist and continuing medical opposition leaving herbalists open to attacks that may partly be addressed by putting herbal practice on a sounder scientific footing (Barker, 2007). In fact, Griggs (1997) tells how the BHMA had been told by the government, in the drafting of the 1968 Medicines act, that non-poisonous herbs that were included in standard reference books might be exempted from expensive requirements of safety and efficacy that were applied to drug medications. Thus the BHMA established its Scientific Committee, resulting in various editions of the BHP. The 1983 edition (British Herbal Medicine Association, 1983) provides quality criteria and therapeutic information for 232 plants or 'botanical drugs'. It represents a collation of material from the 1976, '79 and '81 editions of the BHP. It includes sections on identification and macroscopical and microscopical descriptions before outlining the actions, indications, combinations, preparations and dosages of the herbs, with these therapeutic aspects being based on the clinical experience of key herbal practitioners of the day, although the authors included those with specialist knowledge of pharmacy, pharmacognosy, science and medicine as well as herbal practice. Tassell (2007) reports that ten key members were closely reported in the survey, with up to 60 consulted on specific areas. The dosages sections of the entries reveal what can be seen from a non-clinical perspective, as demonstrating inconsistencies or contradictions. For example, if we take the herb *Cimicifuga racemosa* (Black Cohosh),

the dosages recommended include 0.3 – 2g of the dried material or the same by decoction, representing more than a six-fold variation. If taken as a liquid extract of a 1: 1 strength, meaning 1g was used to make 1ml, then the dose is 0.3 to 2g, which is consistent with the dose of the dried material. However, a tincture dose made using a tincture of one part dried plant to ten parts of 60% alcohol is recommended to be taken in a dose of 2 to 4ml, which is equivalent to 0.2 to 0.4g of the dried plant material. This is less than the decoction or liquid extract dose. These differences in dosage are duplicated within the various monographs, and are hardly surprising as these dosages were based on clinical experience of an unspecified number of practitioners. This dosage range obviously leaves open to question what is the 'right' dosage for a particular individual. This uncertainty was removed by the time that the BHP 1996 edition was published (British Herbal Medicine Association, 1996), with no dosages being recommended at all. This was not the only difference between the earlier and later editions. While the '83 edition contains therapeutic information as discussed above, the '96 edition contains only information on actions, which for most of the herbs is limited to simply one word. *Cimicifuga racemosa* has the following actions in the '83 edition: Antirheumatic; Antitussive; Sedative; Emmenagogue. It is also has the following 'indications': rheumatism, rheumatoid arthritis, intercostal myalgia, sciatica, whooping cough, chorea, tinnitus aurium, dysmennorrhoea, uterine colic, and has 'specific indications' of muscular rheumatism and rheumatoid arthritis. In the '96 edition however, the therapeutic section describes its action solely as 'Anti-inflammatory' and provides no indications. While both editions have information on botanical identification and macroscopical and microscopical descriptions, the latter edition ignores the less biomedically acceptable terms of 'antitussive', 'sedative' and 'emmenagogue', and substitutes 'anti-inflammatory' for 'antirheumatic'.

The desire for the scientific status of herbs can also be seen in the publication of the British Herbal Compendium (BHC) in 1992 (British Herbal Medicine Association, 1992), with its comprehensively referenced summaries of constituents, phytochemical structures, therapeutic uses

and regulatory status. Like the BHP the therapeutic indications of the BHC are based on senior NIMH members' clinical experience. However, they are supported by pharmacological research. As Swale (1994) notes, the monographs contain less information on therapeutic indications than was presented in the 1983 BHP, with information on herb combinations being omitted. She argues that 'Presumably this is because of the BHMA Scientific Committee's wish to give as far as possible only information which can be substantiated by solid research evidence' (p49).

The BHC '92 does give a fuller and referenced description of the actions of black cohosh than the BHP '96 – 'endocrine (pituitary, oestrogen-mimetic) activity [6,9]: emmagogue; antirheumatic'. It also gives the indications as 'menopausal disorders [8, 10 – 17], premenstrual complaints, dysmenorrhoea, uterine spasm [18]' (p34). What can be noted from this is that when the BHC gives references to actions or indications they are all related to its hormonal activity, which had been increasingly researched since the '83 edition, and it is these uses that are foregrounded. Thus the actions and indications in the BHC do not include the traditional 'antitussive' and 'sedative' actions of the BHP '83 that are less evidenced by science. Similarly rheumatic complaints that were once the staple area of application of *Cimicifuga racemosa* are not given as primary indications, but as 'other uses'.

Training

Graham-Little (1935) reports that the NAMH, in 1935, gave instruction via its four 'principal' tutors, located at 46 Bloomsbury Street, London, in 'anatomy and physiology, materia medica and therapeutics, pathology and physical diagnosis, diseases of women and children, chemistry', and that there was an additional postal course in these subjects. There was an oral examination based on a curriculum divided into three periods of three months. This curriculum included 32 subjects, with 12 lectures in each subject. In addition to the subjects mentioned above the course covered 'bacteriology, general medicine, general surgery, gynaecology and obstetrics, paediatrics, orthopaedics, urology, dermatology, oto-rhino-laryngology, ophthalmology, radiology and electricity, venereal

diseases, and infectious diseases....' (p86). The fee for the whole course was 25 guineas. After successful completion of the examinations and oral test, the student was awarded the 'conjoint' degree, made up of 'degree of LCBM' and 'degree of MNAMH', which qualified the recipient for practice. After a year, if the practitioner presented a thesis of at least 5000 words, he would be awarded a higher degree of Doctor of Botanic Medicine. While the exact content of these courses is unknown the NAMH had embraced what appears to be a fairly conventional approach to the development of their curriculum.

W Burns Lingard helped develop the NAMH postal course. His 1958 book 'Herbal prescriptions – from a consultant's case book' (Burns Lingard, 1958) was an attempt, 'at any rate as far as I am concerned' to refute a statement made at the Scarborough conference of 1955 that 'All the old Herbalists who have died have taken their knowledge with them' (p5). He alphabetically lists his formulations for particular conditions. Throughout the book there is no mention of any theoretical or philosophical considerations. It is a purely empirical work, addressing bio-medically defined illnesses. Thus, for example, for 'Blood pressure – hypertension' he says: 'Abnormal tension of the walls of the arteries' and recommends, per dose,

- 'Fl. Ex. Cactusm.15
- Fl. Ex. Crataegus.....m.5
- Fl. Ex. Salix Nig.....m.30
- Fl. Ex. Passiflora.....m.20
- Fl. Ex. Menyanthes.....m.30

The addition of Fl. Ex. Valerian is suitable in many cases but the remedy is not well tolerated by many patients. Diet should be mainly fruitarian and vegetarian. Avoid salt, red meats, pork and all rich food. Avoid alcohol' (p12).

While the formula, like many others in the book, reflects a materia medica drawing on both European and North American herbs, the American concern with concepts drawn from Thomsonianism and Physiomedicalism was absent, being replaced by the empiricism of formulae applicable to diseases. On the other hand, at the same time, A.W. Priest (Priest, 1959; Priest, 1961; Priest, 1962), was producing

teaching material for the NIMH that, for example, continued to emphasize Physiomedical approaches to diagnosis, medication and materia medica. Thus concepts of vitality, relaxation and contraction, stimulation and inhibition, and trophorestoration, remained central, as did a focus on the circulatory and autonomic nervous systems. Priest and Priest (1983) eventually produced a condensed book that drew together some of these teachings.

Thus it is likely that the move away from Physiomedical influences was a gradual one. Barker (2007) notes that in Britain training to be a medical herbalist had been conducted from Hyde's Herbal Clinic in Leicester with training via correspondence and seminars. This training was established in 1969 and ran until 1978 when Hein Zeylstra was appointed as the new principal of the School of Herbal Medicine in Tunbridge Wells on behalf of the NIMH education fund (Shelley, 2014b). The course was taken on a three-year full-time basis or over four years on a part-time basis. It drew heavily from European scientific approaches to herbal practice and marked the end of NIMH training in what had been influenced by the Physiomedical tradition.

Phytochemistry replaced the Vital Force. Traditional use of herbs became less of a justification for their clinical use in training as more evidence was sought from scientific research. The School of Herbal Medicine became an independent college, The College of Herbal Medicine, in 1982, and finally the College of Phytotherapy in 1991. By 1990 the NIMH had approved training clinics in Brighton, Bristol, Coventry, Exeter, London, Manchester and Winchester (Shelley, 2014b). The 1980s and '90s saw a rise in the number of herbal organizations: the College of Practitioners of Phytotherapy was established in 1991, with Hein Zeylstra as its first president, as a body of professional herbalists that sought to represent those herbalists who practiced on a scientific, phytotherapeutic basis, and for whom herbal medicine was seen as being a complete approach to health, not requiring other modalities. Indeed, those who today apply for membership and who practice additional therapies to herbal medicine are likely to be turned down. Other practitioner organizations emerged in the 1980s seeking to

represent those herbalists who had trained outside NIMH or CPP courses. These herbalists had diploma qualifications from courses that emphasized influences such as iridology, naturopathy and energetic systems of healing such as Chinese Medicine and Ayurveda. They included the Unified Register of Herbal Practitioners, the Association of Master Herbalists, and the International Register of Consulting Herbalists. The umbrella organization of the European Herbal Practitioners Association (EHPA) was established in 1993, (later to become the European Herbal and Traditional Medicine Practitioners Association in 2006) when it became clear that the legislative framework for herbal practice in the UK was likely to be challenged by the EU. Eventually there were to be seven degrees in herbal medicine available in the UK as training to degree level was taken outside of the auspices of the NIMH and CPP. The seven courses were at Middlesex University, the University of Westminster, the College of Phytotherapy (externally validated and subsequently moved to the University of East London), Napier's University, the Scottish School of Herbal Medicine, University of Central Lancashire and University of Lincoln. Today, only three degrees remain - Middlesex, Westminster and Lincoln. This reduction is likely due to a number of factors, including the burden of student fees (up to £9000 per year), a saturated higher education market providing herbal medicine degrees, and the influence of a powerful skeptic lobby that sees CAM and BSc degrees as being mutually incompatible (e.g. Colquhoun, 2015; Sense About Science, 2015; Nightingale Collaboration, 2015; Goldacre, 2015).

Since the 1980s, just as evidence-based medicine has sought to influence orthodox medical practice, there has been an increasing emphasis on grounding the practice of herbalists in a scientific evidence base, thus facilitating the awarding of BSc degrees in herbal medicine. This apparent scientization of herbal medicine training, where scientific discourses are emphasized and given more validity than traditional ones, may be seen in the requirement that training courses teach a Core Curriculum based on 9 modules established by the European Herbal and Traditional Medicine Practitioners Association (EHTPA, 2014) in order for

the graduates to be eligible for membership of professional bodies. Most of these modules (e.g. Human Sciences, Clinical Sciences, Plant Chemistry and Pharmacology, Pharmacognosy) are based around the conservatism of orthodox medical training with its basis firmly in the reductionist cause-effect model that assumes human physiological uniformity. Less conservative biomedical content, such as psychoneuroimmunology, has at times been variously taught but have eventually been reduced or squeezed out of courses.

However, one of these eight modules is a module specific for each tradition of herbal medicine. For WHM this module suggests 'using appropriate conventional and complementary diagnostic skills to select herbs'. In fact all the degree courses teach orthodox medical diagnostics via physical examination and case history taking and include 500 hours of clinical practice. So at the level of diagnosis of biomedical disease there appears to be no non-orthodox conception of medical diagnosis although herbalists often use the information gained from long consultations in order to treat a broader understanding of 'what is the matter' with a particular patient.

Beyond the question of diagnosis, in both its 2007 and 2014 versions the module specific for WHM recognizes that 'designations that may describe a particular approach may include but not be limited to, physiomedical, vitalistic, holistic, energetic, phytotherapeutic and biomedical' (EHTPA, 2007, p96; EHTPA, 2014, p 84), and that it is up to each teaching institution to make their approach clear.

The reading list supplied with the 'module specific to WHM' does contain texts that broadly fit into these different designations but, as with all categories, they tend to oversimplification. An examination of many of these and related texts reveals that they often contain elements of other 'designations'. Thus 'phytotherapy' texts (e.g. Mills and Bone, 2000; Bone and Mills, 2013; Conway, 2010; Weiss, 1988), which comfortably turn to science, are not alone in their attention to cutting edge physiology, as this was a hallmark of 19th century-originated Physiomedicalism (e.g. Priest and Priest, 1983) and its application of the then-recent discovery of the autonomic nervous system. In its modern variant Physiomedicalism

also turns to more contemporary science, for example immunology and pharmacokinetics (e.g. Menzies-Trull, 2003). 'Vitalistic' approaches that explain health in terms of activation of the 'vital force' and 'trophorestoration' of tissues and organs are found explicitly within Physiomedicalism but also, more implicitly, within holistic approaches where tissue and organ-specific herbs are selected (Hoffmann, 1983, 2003). The consideration of physical, mental, emotional and spiritual dimensions in such 'holistic' approaches is often addressed in 'energetic' approaches (e.g. Holmes, 2007) where these different levels are seen as being connected via the movement of energy. And such energetic approaches that use various understandings of 'constitutions' and of the qualities of heat, cold, damp, and dry are not averse to taking into account the phytochemical constituents that are the bread and butter (or gluten and butyric acid, if you will excuse the pun), of 'biomedical' evidence-based approaches (Barnes, 2007). It is notable that the 'biomedical' texts are the only texts that remain closed to other designations. Thus most texts that students come into contact with will be hybrids of different designations.

However the textbook most frequently emphasized in training courses, Mills and Bone's 'Principles and Practice of Phytotherapy' (Mills and Bone 2000), has recently been reworked into a second edition (Bone and Mills, 2013) and is one that amasses the weight of scientific evidence within it and can be identified by the number of scientific references and bibliographic sources. As Owen (2013) notes the first edition of this text was a landmark event with its blending of traditional WHM and evidence-based scientific research, clinical approaches, and awareness of regulatory concerns over safety and dosage. The second edition is expanded and revised to take account of the increased research on medicinal plants, pharmacology and pathophysiology and is twice as big as the first edition. Barker (2001) describes the first edition as representing the culmination of the hope that herbal medicine will come to be accepted as an authoritative academic and clinical discipline - 'the whole thrust of this enterprise is to match reputation with scientific evidence', and that 'The writers are afflicted with a condition that besets

all of us in this field: the voice of unrecognition – a complaint for the world to turn to an appreciation of the qualities we husband for the greater good’ (p156). This is equally true for the second edition, in its resourceful marshaling of even more science for the phytotherapeutic endeavor. While tradition, on its own, is less likely to be seen as sufficient to justify a herb’s use in the context of a profession that is seeking recognition, a sense of how easily both science and tradition are resourced is best demonstrated with quotes from a talk by Kerry Bone given after the publication of the second edition.

Kerry Bone (2013) talks about Saffron, describing how research is validating traditional use documented by Avicenna in the 11th Century.

‘Now Saffron is the world’s most expensive spice, and when you think about it, you have this small little crocus growing in a field and people have to go and hand pick just the 3 stigmas from every flower, you can understand what sort of yield you get from each acre, it is not going to be high, and that is why it is so expensive. But the good news is, because it is so concentrated, you don’t necessarily need a very high dose. And in the saffron, in particular, we have the carotenoids in a form as glycosides, and what that means is its not just a concentrated extract, it’s a concentrated enhanced bio-available extract for carotenoids, because when you get the crocins via the saffron tincture, the bacteria in your large bowel take the sugar part off the glycoside. That leaves the carotenoid there to be absorbed. Now the thing that sparked my interest in saffron was the clinical trials that stated coming through in its use in depression.we have a number of trials with saffron,trials where it has been compared with SSRIs and so on, but it doesn’t just stop there, and it shows that saffron has a sphere of influence on the nervous system, because there are some promising early trials on Alzheimer’s disease and there is a trial in PMS. And, fairly recently, a very interesting trial, and it is probably neurological, showing that saffron can regulate appetite.it reduces snacking behavior in people who are overweight.....Also we know of course that the eye is the extension of the nervous system, and we are now seeing some promising early trials in age related macular degeneration. In fact in one open label trial, patients over a 3, 6, 12 month period were able to improve their visual acuity by up to 2 lines on the Snellen chart.....I am

certainly giving Saffron, about 4 or 5ml a day to my patients with AMD.....Also recently we have had some clinical trials of saffron where it was used in patients already on SSRIs.....It found in two separate trials, one in men and one in women, that it reduced sexual dysfunction in patients taking SSRIsit demonstrates that saffron is quite safe to take with SSRIs... I'd like to close by looking at what Avicenna wrote about it in the Cannon of Medicine, and he wrote this more than a thousand years ago. He said oral use of saffron improves the complexion. Well we know that carotenoids do this and there is a carotenoid supplement being developed overseas ...called Astaxanthin the pink colour in krill, and it has been shown in clinical trials to improve the complexion and it's a property of carotenoids. He also said it strengthens the eyesight and is useful in day blindness and he could well have been referring to some sort of variant on AMD that may have occurred many years ago. 'It is a stimulant of sexual desire' and we had those studies of SSRI-induced sexual dysfunction. And he also further said that it reduces the appetite. Isn't it extraordinary that the uses documented by Avicenna over a thousand years ago for saffron are being validated by modern research.'

While herbalists can talk about a herb in ways that draw from science and tradition, it is scientific sources, as seen in the journals, pharmacopeias, texts and training of herbalists that have been foregrounded. It is this, along with a powerful desire for political survival, as seen in the precarious and tenacious history of professional WHM, that has enabled WHM to progress as far as it has today in its venture to gain political recognition, independence and credibility. This suggests that while the 'long goodbye' between the professions of herbal medicine and orthodox medicine is long over, the apparent 'scientization' of herbal medicine leaves open the possibility of a reunion, at least on the part of the profession of WHM.

Let us now turn to the engagement of the social sciences with WHM to see how scholars from these disciplines perceive contemporary WHM.

CHAPTER 5: PARADIGMS AND BEYOND - VIEWS ON WESTERN HERBAL MEDICINE FROM THE SOCIAL SCIENCES

While much of the history of herbal medicine, particularly since the 19th century, remains hidden, there is a small but growing social science literature investigating contemporary WHM.

In a review article, Nissen and Evans (2012) identify 25 academic papers from the social sciences addressing WHM in Europe, North America and Australasia. Of the 18 primary authors of these 25 papers, 7 are qualified in herbal medicine, and at least 6 of these were trained in the UK. This raises several points: that 26 papers shows a low absolute level of social science enquiry into WHM practice; that such academic enquiry, similarly to the history of WHM, is fuelled to a considerable part by herbalists themselves; and that without this curiosity from within herbal medicine, the visibility of WHM in the social science literature would be even more insubstantial than it is.

Mapping of practice

Nissen and Evans (2012) identify two themes in this literature. The first theme is the 'mapping' of practice that investigates the professional titles that are used, the clinical practice, the demographics of herbalists and their patients, and the therapeutic relationship. The second theme is a concern to engage with theoretical issues regarding the development of herbal knowledge. Looking to the first theme, Nissen and Evans (2012) draw on Nissen (2010) to suggest that UK herbalists prefer the term 'medical herbalist'; about 80% of herbalists are female; a 'typical' UK herbalist is also between 41 to 50 years of age, Caucasian, works part time, and gains her patients by word of mouth.

Additional practice-related information may be seen from a recent 'snapshot survey' by the NIMH of its members (NIMH, 2015). The NIMH is the largest body of herbalists in the UK. All 630 members of the NIMH were sent a survey document and asked to record information about patients that consulted them between 5th and 12th March 2012. 195 herbalists responded – a response rate of 30.95%. The largest group of responders fell into the 45 to 55 years age range, followed by 55 to 65

years, then 35 to 45 years, and finally the 25 to 35 years. Of those who responded, 41% had been in practice for between 3 and 10 years. Most of those surveyed (55%) practice from one location, although 28% practice from two locations. Most herbalists work either from multidisciplinary practices or from home, with 34% of herbalists having a retail outlet attached to their clinic. Looking at the regions where herbalists practice, the North-West, South-West, Scotland and South-East have the highest prevalence of herbalists, ranging from 12% to 16%.

The fees for a first consultation predominantly range from £25 to £45, with only 25% charging over £45. A similar picture is seen in the follow-up fees, with 66% of herbalists surveyed charging under £30. The herbalists surveyed had an average of 7 consultations during the week, with 72% of the patients being female. The presenting symptoms of patients showed a dominance of nervous system complaints (especially anxiety, insomnia, depression and low mood, and high stress levels), and gastro-intestinal complaints (especially bloating, abdominal pain and constipation). This was followed by 'general' complaints (especially fatigue and low energy), and by gynaecological symptoms (especially hot sweats/flushes and premenstrual symptoms). Referrals to herbalists was nearly equally by other healthcare professionals or self-referral. If self-referred, other patients and family played an important role in this process.

With respect to the consultation, there has been little work addressing herbal consultations in the UK. What research there is suggests that in the UK most herbalists characterize their practices as 'traditional western herbal medicine', 'Western European' or 'Western herbal medicine'. Furthermore the consultation is largely made up of taking the case history, as well as diagnosis and development of a management plan and dispensing (Nissen and Evans, 2012). Denham (2014) notes, drawing on her 30 years of clinical experience as well as on Conway (2011), that herbalists take a broad clinical history. They may examine the patient, and discuss a wide range of factors including diet and lifestyle, as well as emotional and spiritual meanings. At the same time

they develop a diagnostic rationale for the treatment plan that includes an individualized prescription. Whitehouse (2014) adds that herbalists work within the context of 'shared care' as most patients arrive at a herbalist's door having already visited an orthodox doctor and received a diagnosis.

Paradigms and herbal knowledge

We now turn to the second theme identified by Nissen and Evans (2012): a concern to engage with theoretical issues to do with the development of herbal knowledge. Much of this social science research on WHM suggests that the tradition of WHM is being taken over by science – moving from one paradigm to another, from herbalism to phytotherapy or from expert practitioner to evidence-based herbal medicine. The research often includes a sense of loss about this process. Research into WHM has been conducted mostly in the UK, Australia and Canada, with America notable by its absence.

Jagtenberg and Evans (2003) suggest that: 'In short, the so-called globalization of society and culture has influenced contemporary Western herbal medicine in a number of ways that challenge the rationale of traditional herbalism. As herbal medicine becomes an international industry – *global herbalism* – it is pushed toward a positivist and reductionist philosophical appreciation of the use of medicinal plants' (p323). Looking at the Australian context from the mid 1980s they argue that while traditional Western concepts of toxicity, enervation and suboptimum organ function are of use to herbalists alongside knowledge of pathology and physiology, it is globalization 'in the guise of science, technology and progress that is more likely to destabilize the traditions of Western herbal medicine. This is the direction from which an industry led profession will come' (p324). Thus they see Good Manufacturing Practice (GMP), new industrial techniques and governmental regulation of herbal products as likely to have detrimental effects on the traditional practice of WHM in Australia.

The UK situation has similarly seen the interconnected influences of legislation (most notably the EU's Traditional Herbal Medicine Products Directive), GMP and industrial techniques, on the retail supply of herbal

medicines. However, businesses that supply herbalists with tinctures and dried herbs, because these are not classified as 'finished products', face less stringent requirements in that GMP is not a legal necessity. Despite this there is concern among smaller producers that more and more will be demanded of them by governmental agencies in the future. Casey (2009), in a survey and interview study of Australian herbalists, argues for the concept of 'mainstreaming' in order to understand WHM in Australia. Mainstreaming is a social process where the boundaries between WHM and orthodox healthcare are seen to be shifting, but with the latter becoming dominant. The movement is one way, with WHM taking on orthodox concepts and practices. While Jagtenberg and Evans argue for the deterministic effect of global herbal medicine on herbal practice, Casey similarly argues that WHM is being mainstreamed and, in the process, losing its identity.

Similarly to Casey, and to Jagtenberg and Evans (2003), Evans (2009) argues that Australian herbalists' traditional philosophical basis is being replaced with a science knowledge base, which weakens the ability of herbalists to maintain their professional identity. Evans uses Gross' model of 'cultural location' to suggest that WHM, in placing itself close to the power of science, has trouble maintaining its own identity. Evans (2008), after comparing a herbal text from 1931 with one from 2007, and journal articles from 1989 – 2008, suggests that Australian herbalists are moving towards the use of evidence-based medicine rather than traditional knowledge in their clinical discussions, with phytochemistry and clinical trials being favoured over traditional use. Evans says that EBM 'encourages the development of herbal knowledge based on products made from plants rather than on the plants themselves.'

VanMarie (2003) argues that WHM in the UK assumes the features of orthodox science, particularly in favouring of a science base, in order to be accepted. VanMarie suggests that this biomedical emphasis was a tactic consciously adopted by leaders of the profession. VanMarie also argues that there is an anomaly between the 'phytotherapeutic' education of herbalists and the actual 'traditional' practice of WHM. Although formal

knowledge is not necessarily discarded, practice draws on clinical experience and the various traditions of herbal medicine. Like Casey (2009), Singer and Fisher (2007) turn to the concept of 'mainstreaming' to describe the absorption of non-conventional practices into the orthodox domain such that they are 'co-opted' rather than accepted. Thus 'CAM', including WHM, is mainstreamed in the sense that 'CAM' is an umbrella term that asserts control over these non-conventional practices, where this 'CAM' is an evidence-based method of using natural products. Thus '...the risk is that the integrity of traditional knowledge is eroded through epistemological incursion as these practices are decontextualized and manipulated in order to fit a scientific methodology' (p22). Singer and Fisher suggest that co-option leads to divisions within non-conventional practices – an 'epistemological bifurcation', seen, for example, in the dichotomies of vitalism versus science and of holism versus reductionism, where traditional herbal knowledge faces being swallowed up by biomedicine.

Beyond paradigms

As Wahlberg (2008) points out, these scholars have in common a more or less explicit assumption that there is a battle going on between paradigms, where only one paradigm can win or has won, where WHM is seen as co-opted or colonized by Western biomedicine, with their differences being, in Kuhnian terms, 'incommensurable'. Thus Treasure (2014) employs Kuhn to suggest that the paradigm of 'the Herbal' has been replaced by the paradigm of 'the monograph'.

However, a common criticism of Kuhn is that in his view a new paradigm completely replaces the old one, and that this does not reflect actual practices as closely as he portrays. Fuller (2000, 2006) suggests that Kuhn's writing is 'syncretistic', combining aspects from different historical periods as if they had always coexisted, thus making it easy to find examples that fit his account of the practice of science. Additionally, Fuller has been unable to find an episode of science that demonstrates the full cycle from normal science through to a new normal science. Despite this, Kuhn's ideas have remained firmly embedded, most

powerfully outside historians of science, including in the above scholarly writings on WHM.

In line with these limitations of Kuhn, Wahlberg (2008) employs Canguilhem's (1989) concept of 'normalization' to argue that there has been a more mundane 'collaboration' between herbalists and science. Wahlberg argues that the colonization hypothesis and the other variants of Kuhnian incommensurability cannot account for collaboration between herbalists and chemists regarding the standardization and industrializing of herbal medicine. His study looks at Vietnam and the UK. The Vietnamese research identified the ten-year cooperation of a Vietnamese herbalist with laboratory chemists to produce Heantos, a herbal medicine to treat addictions. However, in the UK arm of his research Wahlberg does not similarly identify herbalists cooperating with chemists. This is likely to be the case because herbalists in the UK are not seen as an indigenous local resource likely to hold valuable hidden knowledge. Herbalists, trained at universities, are seen to have access to similar knowledge that anyone with access to textbooks and journals would have. They are not regarded as having local knowledge. Wahlberg relies less on ethnography and more on texts to suggest that herbalists in the UK appear to have no difficulty in maintaining different explanations for efficacy in their accounts of how herbal medicines work, drawing from both vitalism and from phytochemistry, suggesting that these different paradigms are in fact not incommensurable. This is born out by the examination of herbal texts recommended in the core curriculum for WHM as described above where texts that occupy different designations in fact draw from each other. Additionally it is born out in the quotation of Kerry Bone above who looks to both science and Avicenna. One question, which will be discussed later, is why such differences are so easily incorporated into the approaches of herbalists.

Wahlberg (2008) argues that the 'normalization' of WHM has occurred through three features. Firstly, there is an 'ethno-scientific taming of the countryside', where herbalists have worked with botanists and remedy producers in the Kew Gardens Ethnomedica project to record and archive indigenous UK herbal medicine usage. The archive functions to

provide a resource for phytochemical and pharmacological research into herbal medicines. While this is true, and herbalists are not necessarily opposed to working to further laboratory research into the 'found' remedies of the project, herbalists can easily incorporate the archival material into their practices given that herbalists favour whole plant medicines in their practices and the data collected also references such medicines rather than phytochemical compounds.

Wahlberg's second feature is the 'normalization of living laboratories' where phytochemistry is employed to standardize herbal medicines, replacing organoleptic testing by taste, smell touch and sight. Wahlberg points out that herbalists would likely prefer to give a sufficient quantity of the native whole plant extract rather than a defined amount of a particular constituent. While most companies that supply UK herbalists (e.g. Avicenna Herbs, Rutland biodynamics, Herbs in a Bottle, Granary Herbs, the Organic Herb Trading Company) do not guarantee constituent levels, although some do use chromatographic techniques to identify species and the qualities of a batch, a single company, Mediherb, does make such a guarantee for 70 herbs. They are an Australian company run by Kerry Bone, who was trained in the UK, and who co-authored the most 'authoritative' textbook in WHM (Mills and Bone 2000; Bone and Mills, 2013). His company, which supplies UK herbalists, has a 'Quantified Activity' program that ensures the 'production of consistent quality extracts with guaranteed levels of active constituents' without being 'manipulated in any way by non-traditional processes. They are whole galenical extracts of carefully selected whole herbs' (Mediherb, 2015). The third feature of 'normalization' is the 'search for plausibility'. Thus Wahlberg argues that St John's Wort has become plausible due to the molecular mapping of the pharmacodynamics and pharmacokinetic pathways that its compounds follow in the body. This would not have been possible if this herb was simply talked about in terms of vitalism or other traditional concepts. The concept of synergy, which can be seen as either an additive or holistic concept, has been central in the search for explanations of how phytochemicals work together. Wahlberg argues that 'synergy' has co-circulated in herbalists' and pharmacological realms,

largely because of the different ways that this concept can be understood, and allows interactions between herbal and modern medicine. Thus boundaries between these two realms may be more porous than a paradigmatic view would concede. However, while synergy may be a valuable concept to WHM there is little written on other concepts or philosophies of contemporary herbal practice beyond the attractiveness of 'holism' due to the ease in which it may take on different definitions to suit different purposes (Nissen, 2011).

The above suggests that while some herbalists may be working to archive indigenous knowledge as a resource for phytochemical laboratory work, they are also doing it for other reasons; that while one company that supplies herbal medicines to herbalists does seek to normalize 'the living laboratories', this company is only one of many, and that while 'synergy' may be found in the herbal and pharmacological discussions, there is a lack of research into the concepts and ideas that may be important to practice.

To summarize, the profession of WHM has had to organize to fight for its survival. In its ongoing professionalization it seeks to achieve statutory regulation in order that its members may come to be defined as 'bona fide' practitioners. Herbalists are visible as a cultural phenomenon in need of political regulation by the state, and are addressed in terms of generic competencies that are divorced from the specificities of WHM, particularly the herbs that they use. Part of the professionalization of WHM has involved, since the end of the 19th Century, becoming increasingly allied with science, as seen in the historical development of herbal medicine journals, pharmacopoeias and training. While most scholars argue, from an implicitly or explicitly Kuhnian perspective, that WHM is being colonized, mainstreamed, coopted or taken over by science, it is also suggested that there is a more 'mundane collaboration' between herbalists and science. However, what does not seem to be in dispute is that traditional knowledge is less and less foregrounded in WHM and science is more and more visible.

However, these arguments have been made by referring to the profession of WHM, largely without the voices of individual herbalists being heard. It is to these voices that we will soon turn. And it is these voices that may provide another way of understanding WHM other than as a tension or dialectic between the paradigms of tradition and of science. There may be something else going on in WHM.

PART II: METHODOLOGY AND THEORETICAL UNDERPINNINGS

CHAPTER 6: METHODOLOGY - ARRIVING AT NARRATIVE

This research began as one thing and ended up as another. As the herbalists involved with the research have generously revealed their narratives and shared their time it is congruent that the research should reveal its own methodological narrative.

Law (2004) argues that human subject matter and human relations are multiple and indefinite, too rich to be caught in total by theories. They are also in a state of continuous flux, with only the possibility of knowing limited moments. Law suggests that while some of the world is caught by research, other parts are not, or if they are then this is because 'they have been distorted into clarity' (p2). He then asks: 'If much of the world is vague, diffuse, or unspecific, slippery, emotional, ephemeral, elusive or indistinct, changes like a kaleidoscope, or doesn't really have much of a pattern at all, then where does this leave social science? How might we catch some of the realities we are currently missing? (p2).

The appeal of ethnography

At the outset of the current project it was felt that ethnography was flexible enough, and respectful enough of complex relationships, to accommodate such a view of the world, including of what WHM might be. Ethnography was correspondingly selected in order to seek out rich descriptions, processes, experiences and perceptions and to avoid the simplification of complexities (Williamson, 2006). It was also attractive in that it uses multiple methods that provide triangulation (Hammersley and Atkinson, 2007), is suited to less well-known yet complex phenomena (Madden, 2010) and because it uses both inductive and deductive approaches to build valid local theories for testing both locally and elsewhere (LeCompte and Schensul, 2010). Additionally, the centrality of participant observation and field-based interviews requires that the researcher remains open to unfolding situations, which may modify the initial focus.

The research was planned as a multi-sited ethnography, which Falzon (2009) argues is able to follow people, connections and relationships across space, with the researcher moving physically or conceptually, via

the juxtaposition of data. This allows the configuration of various perspectives in the process of research and focuses on emergent objects of study (Scheid, 2002).

Another reason for selecting ethnography was its centrality to medical anthropology. Comparative studies of medical systems challenge the dualism between modern and traditional medicine and show that all bodies of medical knowledge are dynamic (Nichter and Lock, 2002). Local practices change how 'medicine' or 'science' gets done with the result that hybridized knowledge is put into practice (Adams *et al.*, 2010). In other words, things get mixed up.

In the case of WHM it was felt that the weight of argument suggesting a trajectory of professionalized WHM as engaging more and more with science might not be the whole story. It was felt that by describing WHM as becoming more and more 'scientific' and 'modern' that it was necessarily becoming less and less 'traditional', but that this simple inverse relationship would not likely capture the complexities of the knowledge practices of WHM. Scheid (2006) notes that the problem of such a debate that uses 'traditional' versus 'modern' is that 'traditional' becomes the 'other' of modernity, with no room for seeing anything other than dichotomies. Because of this it was felt that ethnography could reveal what may be hidden by such simplifications, and that it can do this by the presentation of ethnographic cases. Of particular importance to ethnographic cases is the inclusion of 'thick' descriptions: a term coined by Geertz (1973), where behavior is described in such a way that its context is revealed and made meaningful to outsiders.

The difficulty of ethnography in Western Herbal Medicine

However, it soon became evident that spending long periods of time with one or two or a few practitioners, as required for the deep immersion of ethnographies, was unlikely to come to fruition. Contributing to this, alongside any personal qualities of the researcher that may have brought about such an outcome, is the absence within WHM of institutions where an ethnographer can spend time, move about, develop relationships, not get in the way too much or at all, and move between being of an

observer and a participant. Rather, WHM is practiced by herbalists mostly as sole traders, either working from small clinics or from home, making the field-site a rather disparate one, made up of small units variously connected or disconnected with other units, with all the difficulties that that raises for long-term access. While there have been ethnographies of individual practitioners of various disciplines, for example, an Appalachian herbalist (Crellin and Philpott, 1997), a German Heilpraktika (Naraidas, 2011) and a traditional Tanzanian healer (Langwick, 2011), most ethnographies are set within larger physical frameworks that do not exist for WHM. The biggest physical institutions of WHM in the UK are the training institutions. However, as the focus of this research was practitioners rather than students and teachers it was decided not to pursue this avenue.

Thus, a disciplined period of localized immersed research was not possible for this researcher. Carsten (2012) notes that although this is to some extent a romanticized and heroic image of research it is one that is still aspired to within anthropology.

Despite these difficulties, the possibility of conducting interviews with a larger number of practitioners, along with participant observation at consultations and other activities of herbalists' was considered to be more achievable. Thus the project could contain 'ethnographic' components, while not necessarily qualifying as an 'ethnography'. However, there is an additional reason for the project moving away from being an ethnography. The author, as well as being a research student, is also a herbalist who has teaching responsibilities on a herbal medicine degree course. Researching 'at home' (Madden, 2010; Peirano, 1998) has produced dividends, as will hopefully be seen in the 'thickness' of the research. However, the ethical requirements of research and ethics committees, particularly the need for informed consent, has meant that much material experienced during the researcher's exposure to WHM, particularly in his teaching responsibilities and social exchanges with other herbalists, has had to remain as background material rather than being potential ethnographic cases or vignettes.

Looking to cases, lists and walks

Law and Mol (2002) suggest that ways of relating to complexity are needed beyond just saying that simplification suppresses the complex. They argue that 'classificatory systems', 'examples' and 'maps' are commonly used tools in social science research. Classificatory systems present the possibility of an inclusive overview by providing categories that can often be further subdivided; examples claim to be representative of something larger; and maps make overviews.

Law and Mol (2002) argue however that these tools are not respectful of complexity and instead we are offered some alternatives. Instead of classificatory systems, examples and maps they offer up lists, cases and walks. Lists are favored over classificatory systems, with lists being open in their self-recognition of incompleteness, and not necessarily imposing a single order. They refer to Foucault's (2001) admission that Borges' list of animals from a Chinese encyclopedia 'shattered...all the familiar landmarks of my thought' (pxv) in that it managed to group together without taming or ordering. The list of animals was 'a) belonging to the emperor, b) embalmed c) tame, d) suckling pigs, e) sirens f) fabulous g) stray dogs h) included in the present classification i) frenzied j) innumerable k) drawn with a very fine camelhair brush, l) et cetera m) having just broken the water pitcher n) that from a long way off look like flies' (pxv). Some list, indeed.

The current research does indeed use some classification, particularly regarding how herbalists became herbalists and how this may be understood to have had an impact on them. And indeed, this classification is useful for the eventual suggestion of what WHM may be. However, this research does not seek to produce a list of herbalists' cases that necessarily 'add up' to 'WHM', rather it is necessarily an incomplete list, which can be added to, which will change what is known. For Law and Mol (2002), cases are favored over examples, with cases being phenomena in their own right, having the potential to be relevant beyond their own sites, although that cannot be taken for granted. Cases 'are able to do all kinds of other work' including sensitizing the reader to previously unseen situations, condensing a range of experiences and

working allegorically. It is hoped that while the herbalists' cases presented below can be considered on their own to give a sense or flavour of the particular herbalist, that they additionally have relevance to what WHM may be.

And finally, for Law and Mol, walks are favored over maps, with walks covering space but not giving overviews. Thus the cases presented cover space, but do not claim to give the whole picture of herbalists or of WHM. In summary, cases will be used to start a forever incomplete but useful 'list' of herbalists' narratives that seeks to contribute to the understanding of WHM. Hence this research works with categorization *and* with lists, and with cases that have the potential to be examples.

A Narrative Backbone

A narrative interview method was eventually selected as the backbone for the research for its own reasons but also because of its compatibilities with the ethnographic elements of this research. Narrative methods, like ethnography, are complexity respecting in their ability to seek out rich descriptions and experiences, although they draw from words rather than additionally from actions. Like ethnography, narrative methods are suited to less well-known phenomenon, and can use both inductive and deductive approaches to the generation of explanations, and they are open to unfolding situations such that the initial focus may be modified. These similarities make narrative methods coherent with participant observation such that the latter may add flesh to the backbone of the narrative interview.

Additionally, the narrative interviews undertaken have some similarities with ethnographic interviews. Barker (2012), suggests that the ethnographic interview aims for both embeddedness and openness in order 'to create conditions that allow for encounters with the unexpected, and hence, for discovery' (p55). Barker describes embeddedness as meaning that the interview takes place within the social world that is being studied and from within a field of knowledge about the world of the informant. While the current research does not involve the deep

immersion of an ethnography, embeddedness arises from two sources. It arises from the interviews taking place within the informants' physical and social worlds, mostly their practices, but additionally from the fact that the researcher is also a herbalist, with his knowledge of WHM that is both local to him and also held in common with the informants. Turning to consider 'openness', it will be seen that the type of narrative interview adopted in this research is particularly open by virtue of its 'minimalist-passive' interviewing technique that cedes interview control from the interviewer to the informant.

There were also primary reasons for selecting a narrative methodology that have nothing to do with its compatibility with ethnographic methods of participant-observation or the ethnographic interview. Herbalists' narratives and voices seem to be absent from what little research has been conducted into WHM. Even in Nissen's (2009) feminist ethnography of WHM in the UK and in Evan's (2009) interviews with Australian herbalists, the tangible presence of these herbalists, either through actions or words, are barely felt. Furthermore, the author believes that herbalists' narratives are more revealing than his assumptions or researched questions could be. Narrative interview methods allow subjects and areas of concern to arise in the telling rather than in response to pre-formulated asking. This avoids the predetermined assumptions of semi-structured probing, one of the 'apparatuses of the interview machine' (Denzin, 2001). Thus as a herbalist who is also a researcher investigating herbalists the author wanted to avoid only seeing what he already 'knew' or was looking for. The interviewer's initial role as a reflective, receptive participant in the storytelling process was felt to be a necessary precondition for the active retelling of these stories in a written authored thesis. Furthermore, it was felt that the presentation of herbalists' narrative cases would reflect the activities of herbalists in that their consultations involve listening to the illness and other narratives of patients, while herbalists' narratives remain untold.

A Walk Through Narrative

The definition of narrative itself is in dispute (Shukla *et al.*, 2014). Life stories, stories of events, and personal narratives most broadly conceived of as talk over the course of an interview, are all seen as being narratives. However, narrative is increasingly seen as 'performative', functioning to construct and enact identity in relation to the audience. Riessman (2008) argues that narrative includes the following functions for the teller: to remember, argue, persuade, engage, justify, entertain, mislead and to mobilize. Riessman (1990) also argues that making narratives is a major way that individuals make sense of their past. Each form of narrative helps narrators solve the 'tellers problem' i.e. convincing the listener of the justification for their perspective.

Some countries have a strong tradition of narrative research, with West (2014) pointing back to Weber in Germany at the beginning of the last century. However, Merrill and West (2009) suggest that over the last 30 years there has been a biographical or narrative 'turn' in the academy, largely in response to the historical marginalization of the human subject in research. This turn can be seen as part of wide-ranging challenges to positivism and realism (Riessman, 2008). Langellier (2001) locates the beginning of the narrative turn earlier - in the 1960s. Thus, the boom in memoir literature and popular culture and the rise of new identity movements, therapeutic culture and the turn away from Marxist class analysis in the post soviet era are seen as contributing to the rise of narrative. West (2014) adds that, in the 1960s, the influence of oral history movements and psychosocial perspectives resulted in fertile ground for narrative research seen in the increasing respect for subjects and by the interview as an empowering endeavor for the interviewee. West (2014) points out that C Wright Mills in 'The Sociological Imagination' of 1958 observed that biographies represent the meeting point of individual agency, history and structuring processes. West notes that 42 years later Bron and West (2000) similarly suggest that biographical methods provide insight into the dynamic tensions in people's lives between being 'storied' and actively 'storying'. Thus degrees of agency are seen in narratives.

While narrative methods had certainly gained academic ground, Loots *et al.* (2013) point out that in the postwar years the eventual acceptance of humanistic narrative methods in sociology resulted in the promotion of the unified singular agentic storyteller, with the subject seen as an evolving story that integrates experiences, actions and thoughts into a meaningful unity. This linear and singular model of self-hood has been challenged by postmodern and post-structuralist approaches that see narratives as performances in which self-hood is forever constructed. For example, Deleuze and Guattari (2004) suggest that thought is not a simple representation of reality but a 'rhizomatic' process consisting of an open decentralized network, with branches to all sides, governed by principles of connection, multiplicity, ruptures and cartography. Thus Loots *et al.* (2013) support the suggestion by Sermijn *et al.* (2008) that selfhood be characterized as a rhizomatic story with multiple entryways, where there exists no single correct entryway leading to the true self, but rather with the self being open to change. This thesis suggests that the selves of the herbalists discussed via their narratives, and hence what WHM may be, are indeed open to change, and that this can occur in relationships with plants.

Biographic Narrative Interpretative Method for data collection

Biographic narrative interviews were selected partly because autobiographical self-reflection supports research by identifying or clarifying a focus for enquiry (Bold, 2012). This interview method was also selected because its focus on the story helps to reduce the likelihood of the researcher's own assumptions and background unduly influencing the interview relationship dynamic.

Specifically, the Biographic Narrative Interpretative Method (BNIM) as developed by Tom Wengraf (2001, 2012), was identified and modified as the method for interview data collection. The interview begins with the following 'SQUIN' (Single QUestion aimed at Inducing Narrative): 'please tell me the story of your involvement with herbal medicine, that's all the events and experiences that are important to you. Please start your story

as far back as you would like. I won't interrupt or ask any questions, but I will take some notes for later.'

Using this 'minimalist-passive' SQUIN, where the informant is not interrupted until they have finished, the researcher must be willing to give 'control' of the interview to the informant and be willing to be an active listener. This first part of the interview usually ended up with the herbalists saying something like 'and that's about it.' It was always the subject who brought the interview session to an end. If the herbalist sought help, the researcher responding with a gentle 'nudge', for example, saying, 'well, can you tell me a bit more?' Only on one occasion did the researcher 'rescue' the herbalist with a further question. It was notable that when this happened it became more difficult to return to the minimalist- passive interview structure.

After this first part of the interview is completed there is a short break if the informant or researcher feels it is necessary. Then the interview continues with the researcher asking questions based on what the informant has said, seeking more descriptive depth on specific topics, using the informants words and phrases, asking questions directly on the subjects that the informant introduced, in the order that they were introduced, without the researcher introducing topics that were not raised by the informant.

However, as the research progressed, the researcher found it useful to ask questions based on what other informants had brought up, either from interviews or based on the ethnographic components of the research. While this broke the 'sealed' nature of the interview, these questions were asked at the end so as not to jeopardize the Gestalt of the preceding interview parts. However, the price to pay for this additional information was a loss of Gestalt towards the end of some of the interviews. To these participants the researcher can only apologize. There were two interviews that fell outside the descriptions above. The first was with a herbalist who was also a herbal medicine grower and supplier, where the author sought the story of the journey of the respondent's herbs, from seed to product. The second was with a herbalist who was also a researcher, having recently completed a

randomized clinical trial, where it was the narrative about the research process that was sought. Both these interviews were more conventionally dialogic than the BNIM method, largely because they appeared to be about less about personal experiences. However, upon reflection it was the method of questioning, in addition to the subject matter, which made the interviews appear to be less personal.

Immediately after the interviews, notes were made on the interviews, with initial impressions and ideas being noted. The interviews were then listened to at least twice. On a third listening further notes were taken. The interviews were then transcribed by the researcher or by a transcription agency. The interviews plus field-notes from the observations of consultations and other ethnographic data were then coded, i.e. segments of text were identified that had relevance to the research question.

From a happy semantic confusion to a research question

It soon became apparent that the initial question ‘please tell me the story of your involvement with herbal medicine....’, was interpreted by some herbalists as simply asking how they came to be interested in herbal medicine, and they spent much time on this before they came to describe later events. Besides the amount of time they spent telling this first part of their narrative, it was the content of these ‘entryways’ to becoming herbalists that eventually led to the research question: ‘how do herbalists’ entryways relate to the rest of their narratives and to WHM?’

Developing an analytical approach

The current project adopted the minimalist-passive interviewing technique of BNIM. Let us now look to how BNIM approaches analysis. Jones (2003) describes how the ‘lived life’, i.e. the chronological events in the narrative, is analysed sequentially in BNIM by the reflecting teams that have been gathered by the researcher. The teams also address the ‘told story’, or the thematic ordering of the narrative. This is arrived at using ‘thematic field analysis’, which involves the reflecting teams ‘reconstructing’ the informant’s system of knowledge and interpretations

of experiences into 'thematic fields'. Finally, the case history is constructed from hypothesizing how the 'lived life' informs the 'told story'. There were several reasons for not adopting this approach to analysis. Firstly, accessing reflecting teams would have been problematic. However, the most pressing reason was a desire to include a wider number of herbalists than would be manageable with a BNIM analytic framework, where typically a handful of interviews would have fitted within the confines of a PhD. A larger number of herbalists was sought in order to more reliably consider what WHM might be. Although not aiming to generalize from the cases, it was felt that having at least 20 informants would make it more feasible to then select cases and take the discussion towards 'WHM'.

'Thematic' approaches to analysis across cases (e.g. Braun and Clarke, 2006, 2013) were considered. However, it was felt that methods that fragment accounts into categories that are then separated from the rest of the individual inhibits the agency of these individuals. If this thesis allows for the possibility that plants are agentic, as will be seen, it would have been inconsistent to remove agency from individual herbalists. 'Fracturing the data in the service of their interpretation' (Strauss cited in Riessman, 2008, p229) is a better way of putting what this researcher sought to avoid. This fracturing ignores the sequential elements that are seen in the cases of narrative approaches, which are preserved and treated analytically as units, and which can be used to generate arguments and theoretical positions, as well as forming the basis for other work.

While BNIM has a pre-defined approach to analysis, Riessman (2008) argues that since narrative research varies so widely in terms of kinds of data, epistemology, research questions and even what narrative is, that the method of analysis of narrative data is best tailored to the local particularities of the research. Riessman (2008) uses a framework of four questions to look at thematic approaches to narrative analysis that keep cases whole: How is the concept of narrative used? How is the data constructed into text for analysis? What is the 'unit of analysis' or focus? What context is paid attention by the researcher – local or societal? Let's

take these in turn. 'Narrative' in this project refers to the story of the herbalists' involvement in herbal medicine as elicited in the BNIM interview, along with descriptions from participant observation at consultations and other events attended as well as gathered ethnographic material. Looking to the second question, it is interview transcriptions, and other texts from herbalists in the project, e.g. email and other communications with the researcher plus website information, along with field-notes from participant observation, that form the constructed text for analysis. Turning to the third question, the focus, or 'unit of analysis', is the 'entryways' of the herbalists, i.e. the events and experiences that they value as important in their becoming herbalists, and how they relate to the rest of their narratives. These questions are then later related to WHM may be. The context that is attended to in this research is sociological rather than local, seen in the question of how the narratives relate to 'WHM'.

The herbalists' narratives are interpreted in light of ideas that have been developed throughout the research. This includes the influence of novel insights from the data themselves, a political commitment to tell the stories of herbalists, and relevant theoretical work, particularly following engagement with the work of Weber, Abram, Latour, Szerszynski and Bennett as will be discussed below.

In summary, the aim is to keep the stories 'intact', to understand them as whole cases and to theorize from them, but also to look from cases towards WHM.

The herbalists

26 herbalists were involved in the research. Identifying remarks have not been included and they are anonymized with randomly allocated initials. 11 are male and 15 are female. The gathering of data took place between June 2012 and September 2014. All but one of the herbalists was interviewed at their place of work. The ages of the herbalists ranged from mid 20s to late 60s. Geographically, they were located in Yorkshire, Kent, London, Surrey, Norfolk, Herefordshire, Hampshire, Essex, Lancashire, Sussex, Rutland and Scotland. There was additional

ethnographic work involving observation of 58 consultations, for which informed consent was obtained from the patients. Some of these consultations are referred to in the cases that are discussed below.

There was also background ethnographic fieldwork at 5 conferences, 8 seminars or workshops, along with numerous conversations and other communications with herbalists and herbal students, as well as participation on three internet-based discussion groups for professional herbalists.

All herbalists were members of professional associations of herbalists. All but one of the herbalists were members of either the NIMH or CPP, which have current entry requirements of BSc degrees. For those herbalists who qualified before BSc degrees in herbal medicine were offered, all but one of them attained their qualifications at the School of Herbal Medicine or its later incarnations as the College of Herbal Medicine and finally the College of Phytotherapy. Notably, all of the herbal medicine degree course leaders were trained via this route, with the University curricula for herbal medicine courses being heavily influenced by the trajectory of the course leaders' own training, along with the input of professional associations and the EHTPA. The reason for selecting 25 out of 26 herbalists from this background, rather than those who had qualified by different routes and who would be members of different professional associations, was that the most new practitioners now arrive in practice via studying on degree programs. However, the researcher is aware that the stories of alternative routes to professional practice have not been included in the current research.

Selecting herbalists

As a starting point herbalists were sought to reflect a variety of approaches to practice. This was achieved with the help of key informants who have extensive knowledge of herbal medicine practice. Subsequently, herbalists made other suggestions of herbalists to contact, which were then considered by the researcher and his supervisors, thus threading 'snowballing' onto 'maximum variation' sampling. However, it soon became clear from the interviews and from participant observation

that herbalists' stories and their clinical encounters were complex events that should be treated, as much as possible, as cases rather than as examples. So the very idea of sampling for varieties or types was brought into question quite early on in the research process. It seems that lives produce narratives that produce variation even if some themes may be identified within such complexity.

Selecting and presenting cases

Not all of the cases will be presented. Cases have not been selected to be representative but rather to develop a theoretical argument. The subsample of 13 herbalists was selected based on the 'thickness' of the interview and ethnographic data and the ability to illustrate patterns, particularly what will be called the 'push' and 'pull' of enchantment, and how both more 'traditional' and more 'modern' practitioners are open to this process. One herbalist, TE, was included as the case of a relatively 'disenchanted' approach to practice.

The herbalists that are not included as cases in this thesis contain themes found in the presented cases. These include experiencing a 'calling' at a young age (in a pram, and later at age 14 years), and being 'awakened' to plants at 18 months; self treatment with herbs as entryways; entryways of family members, for example, a husband, children and wife being treated by herbal medicine; entryway of own illness; medical family background as an entryway; entryways of living herbs introducing themselves; the move from orthodox medicinal science to herbal medicine; the pleasure of nature and gardens but these experiences not being necessary for practice; the importance of simply being around plants; plants talking to a herbalist; importance of female elders in her family and their use of herbal medicines; importance of the use of orthodox clinical examinations; concern over lack of evidence supporting herbal medicine; seeking a deeper connection with living herbs; learning directly from plants via a method that can be followed; starting from scratch each time in the consultation with patients; the importance of combining energetics, theory and empiricism; and the safety of WHM training.

There were additional reasons for not including some herbalists as presented cases. These included herbal medicine not being the main treatment that the practitioner used, the difficulty in keeping the herbalist anonymous, and an interview being cut short. Also, as mentioned above, one interview was focused on the narrative of a herbalist's involvement with research and another with the commercial cultivation of herbal medicines, which were not relevant to the question that emerged out of the research.

The presentation of the cases is also important. Each case is initially presented in what is hoped to be a 'thick description' format, with extended quotes from the narrative, as well as some ethnographic descriptions. Only after this has had the opportunity to 'do some kind of other work', to settle into the reader and bring the narrative to life, is there a section reflecting on the herbalist, turning towards analysis of the case after the description has been made. Further analysis is undertaken in the discussion section of the thesis.

CHAPTER 7: ENTRYWAYS

Some entrances are obvious and some are not. Some are so obvious that they are taken for granted, and some are hidden in the undergrowth. 'Entryways' suggests a link between the entrance and the way, and as such has been selected to describe herbalists' early beginnings, those events and experiences that lead them to become herbalists. While there is some linearity in the idea of 'entryways' at the start of a 'path' to becoming something, it will also be seen that the relationship between herbalists, entryways and paths is not always predictable and that the agency of herbalists exists in an emergent relationship to the non-human, particularly herbs themselves.

The subjects of this study are herbalists in the UK who practice Western Herbal Medicine. Some of their entryways are 'visible' in the sense that there is congruence between their beginnings and WHM as an increasingly professionalized practice. Thus we will see how personal experience of treatment with herbal medicines, the search for a new career and spending time in nature are visible entryways, providing routes into the profession. These entryways are unremarkable in that empirical experiences of the activities of the profession, the desire for a career, and contact with the tools of a profession are common routes for entry into any profession.

But other entryways are 'hidden', meaning that they have not been described before in the fragmented history of WHM, nor are they seen in the political history of the profession or in the profession's engagement with science or in social science research into WHM. Rather, these entryways relate to herbs themselves in ways that challenge boundaries between humans and non-humans. As such they are hidden.

The visible entryways will be discussed first, before we root around in the undergrowth to look at the hidden entryways. The entryways were elicited in the course of the biographic narrative interviews with herbalists.

These visible and hidden beginnings have not previously been documented for WHM. Barnes (2009) has described how anthropology

has looked to 'shamanic traditions and to experiential entryways such as dreams, visions, spirit journeys, pivotal illness experiences, and family traditions' (p142), with much of this literature being concerned with 'traditional' healers outside of Europe and North America. Barnes also points out how parallels between such entryways and the practice of psychotherapy were sought between the 1960s and 1980s in North America. Barnes notes that while there has been a research interest in how different groups pursue professional status, there has been little interest in the experiences that motivate or move people to take up training and practice as a 'CAM' practitioner, with questions of vocation quickly turning into questions of professionalism. The adoption of a biographic narrative interview methodology, with its single initial question, avoids this problem, preferring to let the respondents reveal their narratives themselves. The entryways, both visible and hidden, will now be briefly discussed for a number of herbalists, most of whom we will return to later in the cases. Direct quotes providing 'thick' descriptions will be reserved for the subsequent 'cases'. For now, the intention is simply to highlight the difference between visible and hidden entryways.

Visible Entryways

FW describes how the successful treatment of her own children with herbal medicines, along with her German mother-in-law's experience of receiving herbal medicine within orthodox healthcare, contributed to her decision to study herbal medicine in the UK. She was also looking for a safe alternative to orthodox medicine. Also important for her was having her own profession.

TE describes the importance of growing up with a mother who was passionate about gardens for his eventually becoming a herbalist. He was also searching for a second career after his law practice lost its appeal.

CP comes from a very medical family. Her mother was a private GP who worked from home, whose clinic phone CP used to answer for her mother. Now CP also works from home and her own children answer her clinic phone for her. During a career in TV she became interested in the

clinical encounter and decided to study acupuncture. She then had difficulty getting pregnant. She was prescribed Chinese herbs from one of the most respected Chinese Medicine practitioners in the UK, as well as from the top gynaecologist in Fujian province in China. Neither treatment helped. After hearing about a Western herb for fertility she visited a practitioner of WHM and became pregnant.

FD ran a smallholding, keeping goats, chickens and pigs. She read a book by Juliet de Bairacli Levy about treating animals with herbal medicines and eventually studied to be a professional herbalist after initially doing a one-year introductory course.

EP's father was a surgeon, her mother a nurse and her stepmother a pharmacist and EP herself went into nursing. She remembers a patient who was taking steroid suppositories for an anal fissure without success. This patient saw a herbalist who treated her successfully. This impressed EP because she thought if you were taking steroids that there was no alternative.

SB traces his involvement with herbs back to when he was three or four years old when he used to spend time with his grandmother at weekends in her herb garden. At school he loved chemistry and became interested in plant chemistry. He grew about 150 herbs in his parents' garden, knowing them throughout their life cycle. He dried the herbs and stored them but didn't know what to do with them. When he studied for a chemistry degree he left herbs behind him. Much later, when looking for an alternative to his lecturing career he discovered a textbook on herbal medicine.

GA grew up on a tough housing estate and getting out into the countryside was an attractive refuge for him. Spending his time walking and bike riding he developed an interest in identifying and tasting herbs. Later on, a girlfriend of his was treated by an acupuncturist, who prescribed herbs, including yarrow, and GA realized he could go just go out and pick it instead.

MN started medical school but only lasted one year, becoming disillusioned with the training, where the 'human being was nowhere to be seen'. He then became interested in the organic food movement and

started growing herbs. He found the work of the French herbalist Maurice Messegue, which he said 'sang to me'.

DP came from a family where his grandfather, father, and brothers were all doctors. He qualified as a doctor but during his studies became ill with an undiagnosed condition. He wrote in to a doctors' magazine seeking help. He received advice from doctors, suggesting nutrition, herbs, homeopathy, and being happy. Eventually he studied homeopathy and later, WHM.

CJ looks back to her childhood, where her gran looked after her wounded husband after WW2, using folk remedies. CJ also sought a second career beyond accounts and was drawn to the quantifiable nature of herbal medicines.

PT's husband had experienced WHM at a training clinic for his hay fever and found that it helped him. PT loved gardening and looked for a new career after her children were at school. She read about the herbal medicine course at the College of Phytotherapy. She went down to have a look at the College, where she met one of the staff who appeared to be trying to put her off, saying that 'you'll never make a living as a herbalist', but she was already hooked at that stage.

NE's wife got sick with severe diarrhea in an Ecuadorian frontier town on a trip into the rainforest. After trying all the drug medications available without success, they were directed to a different guesthouse run by a woman who gave NE's wife some herbal medicine and within an hour her cramps disappeared. The next morning she told NE 'I'm really hungry'.

From these brief summaries, most of which will later be connected with their later lives and with 'WHM', it is possible to see the importance of the empirical experience of the treatment of self, family and others with herbs in deciding to study herbal medicine formally. Also important is the search for an alternative career or profession. And the third focus is the experience of herbs as part of nature, in gardens and the countryside. The direct experience of herbal treatment, familiarity with nature and living herbs and the search for a career are unsurprising and visible routes to WHM.

Hidden Entryways

Let us now turn to the 'hidden entryways' that individuals found to becoming herbalists.

CT grew up in a mining village and describes himself as having, since childhood, a 'naturphilic' predisposition, simply through spending time in nature, particularly in broad-leaved woodland. He found nature to be a refuge and safe place. He was influenced by Native American culture. He would listen to the wind passing through the trees and try to understand what they were saying. He also had a spiritual orientation that he developed through his engagement with and questioning of Roman Catholicism. He found 'something transcendent' in nature rather than in organized religion.

RC says that 'My vocation was established at 4 years of age'. He goes on to say that he, of course, 'didn't realize it at the time'. He remembers 'running, playing He' on a farm which had a gypsy caravan on a warm sunny day. He was running and fell over and smelt yarrow while laying on the ground face down. 'I didn't know its name then'. 'I kept my face in the grass'...'I was involved with plants without being involved at all'.

Also he found that he knew stuff about the body at school without having ever learnt it, he just knew it, and children approached him for help. He also knew as a child that the herbs in his 'Letts' diary were medicinal, he just knew. There was also his own illness when, as a young man in France he developed a 'crisis de foi', and was told it was due to the mistral. He was successfully treated with herbs, particularly thyme, with its heady smell and taste. He reports that it was this experience that gave him the courage to look at his own illness history.

RM remembers being in her pram and having a sense of wanting to do something of value and that later this became 'doing something of service'. She also remembers, at about the age of 14, having an 'epiphany' while living on a Loch in Scotland. She remembers 'looking at this absolute glory of nature' and thinking 'what am I, what do I do with this knowledge or this appreciation? That was the thing.'

AF's father was interested in natural history and would take AF out on walks, identifying birds and trees and seeing meadows covered with

butterflies. At the age of five the spirits of the plants called him. He remembers sitting and looking at the plants and becoming aware of the differences between all the plants. He became aware of Red Dead Nettle, 'as a separate entity with a separate spirit.....that's when the spirits of the plants called me.'

BC remembers being called by grass when she was still in nappies. She was surrounded by grass taller than her and experienced a 'still, beautiful, complete world.' When she was about five years old she noticed grass growing through paving stones and experienced a similar 'sense of enormity' that she describes as a 'calling'.

And finally we have KA. She remembers that trees started talking to her as a kid. They stopped and then started again. The noisiest trees were Yew trees. She had conversations with these trees, listening and tuning into what they were telling her about themselves.

Crossings

Visible entryways, in addition to the empirical experience of the efficacy of herbs as medicines and the desire to enter a profession, include the experience of spending time with living plants, either in gardens or in wider nature. However, the cases of the hidden entryways highlight more closely the connection between people and non-human living nature. It becomes not simply about a person being IN nature, surrounded by it, but the blurring of boundaries between a person and nature, between subject and object. Thus CT talks of 'naturphilia', in fact he spells it out 'N-A-T-U-R philia', even dropping a letter, merging the words, where he listens to trees and sees god as speaking from nature, finding something transcendent in nature. This may not be as acceptable to some as simply stating that those who enjoy nature are more likely to end up as herbalists than those that don't. However, the link between spending time with nature and 'crossing' over with it may turn out to be more blurred and important than is thought.

RC identifies as important the smell of yarrow, while lying on the ground after having fallen, at the age of four, in his genesis as a herbalist. RC also simply 'knew things', about health and about the herbs in his Letts

diary, without having been taught them. These again point to something hidden from view, something learnt from or about plants. RM's experience of a sense of service at such a young age that she was in a pram, and her concern as a teenager with wanting to do something with her appreciation of nature, also suggest something outside the visible entryways of simply liking plants.

AF being called by red deadnettle at the age of five, like BC being called by grass whilst still in nappies, and KA's conversations with trees, highlight cross species communication that is beyond simply being IN nature, but rather being part of it, where boundaries between the human subject and non-human object are blurred.

Barnes (2009), as discussed above, identifies dreams, visions, spirit journeys, pivotal illness experiences and family traditions as being important steps on the road to becoming shamans. Similarly, with the herbalists in this study, key factors in their genesis as herbalists include being called by plants, illness experiences and family traditions of medicine, if not herbalism.

DuBois (2009) identifies the importance of being called by spirits, the volition or acquiescence to spirits, compulsion with the threat of terrible consequences if the call is refused, and transformative spiritual ordeals as being important factors in the lives of those who were to become shamans. In the cases of the herbalists discussed, there is calling in the entryways of BC and AF; there is illness experience in RC's account; there is volition rather than compulsion with threat in these narratives e.g. in RM's wanting to know how she could be of service with her appreciation of nature, and in CT's listening to trees. While there are no experiences that can easily be labeled as transformative spiritual ordeals in the entryways, there are such ordeals in their later narratives, which will be discussed in the individual cases.

These similarities suggest that healing traditions from the heart of modernity and the localism of shamanism likely have more in common than was thought.

A question

Herbalists' narratives reveal both visible and hidden entryways to becoming herbalists. The former speak of the importance of personal experience of successful outcomes to taking herbal medicines, the search for new careers and of spending time in nature. The latter, hidden entryways bring into relief the connection with nature of those who will become herbalists, such that the boundaries between the human and non-human become blurred. Crossings occur. Indeed, the entryways of herbalists are not that far removed from the entryways of shamans. However, as we have seen, much existing social science research into WHM suggests that there is a clash of paradigms between tradition and science, with the latter either dominating, co-opting or colonizing the former, or with some degree of collaboration on the part of herbalists in the 'normalization' of WHM. However, both these perspectives, either implicitly or explicitly, view traditional knowledge as being eclipsed by science. This argument is given weight by the historical development of the profession of WHM, which has been shown, in its fight for survival and political recognition, to have promoted a scientific conception of WHM.

The existence of crossings as described in the hidden entryways of contemporary herbalists, and the apparent dominant influence of science on WHM is an interesting tension that may be explored by asking: What is the relationship between the herbalists' entryways and the rest of their narratives and 'WHM'?

It is this question, and its resonance with other practices, that this thesis seeks to explore. The cases presented will explore the first part of this question, while its relationship to WHM will be considered later. Now we will turn to a consideration of the key authors that have helped provide orientations for the data.

CHAPTER 8: CONCEPTUAL ORIENTATIONS

In order to address the question of how and why some entryways are more visible than others and how herbalists' beginnings relate to the rest of their narratives and to WHM we will soon turn to those authors who provide conceptual orientations for this work. These writings can broadly be positioned within debates on the place of enchantment in modernity. While these terms are at times slippery the enchantment found within WHM will later be described and defined. Looking to the concept of modernity, Michael Saler (2006) points out that although the term is often defined in divergent and even contradictory ways there is a working consensus that diverse factors merged synergistically in the West during the period from the 16th to 19th centuries and which generated what we have come to understand as modernity. These factors include the ascendancy of the rational, autonomous individual, the emergence of democratic liberal states, the development of self-reflexivity and the rise of the 'isms', particularly secularism, consumerism, capitalism, nationalism and scientism.

Max Weber (1864 – 1920) and his observations on the displacement of enchantment by rationalization in the modern world provide a starting point that will lead us to the contemporary thinking of Bruno Latour, David Abram, Bronislaw Szerszynski and Jane Bennett and how they relate to WHM.

However, before we get to look at these specific contributions, it will be useful to consider that prior to and alongside Weber other social theorists also developed conceptual landscapes that can be seen as articulating in different ways with (dis)enchantment and may have been necessary for Weber's thinking.

For Thomas Hobbes (1588 - 1679), the state of man can only be improved upon - '...during the time men live without a common power to keep them all in awe, they are in that condition which is called war; and such a war as is of every man against every man' (Hobbes, 2014 [1651], p97). For Hobbes, this necessitated mutual contracts in order to lay the foundations for political society and government, important institutions of liberal states within what would become modernity. 'Awe' comes not from

nature, religion or from the past but from political institutions, which have the power to enchant and pull men away from conflict.

While Hobbes was enamored with the development of modern political institutions, Weber's sense of the loss of something in the face of modernity is found amongst other social theorists. For some, like Weber, it is a price worth paying and for others the cost is too high, with various solutions being proposed, some conservative and some revolutionary.

For Rousseau (1712 – 1778), loss is powerfully present, which can be seen in the famous opening sentence of *The Social Contract*, 'Man is born free, and everywhere he is in chains' (1998 [1762], p5). While natural man lives free and happy in the forest, the modern condition is defined by inequality and unhappiness, even if families, cities and technology provide some solace. Something has been lost, even if something has been gained. As such, the task is to build political institutions that allow compassion to be at the heart of legislation.

For Marx, (1818 – 1883), the history of the world is a history of class struggle, where 'alienation' (Marx, 2013 [1867 vol I; 1884 vol2]) describes the estrangement of people from their nature that arises due to living in a class society. In the disenchanting process of alienation people become foreign to their world. And at the root of alienation is the selling of one's labour. The products produced are not an expression of the essence of the worker, workers do not see themselves in their products and consumers do not see workers in products. This alienation through labour exploitation was the foundation for the revolutionary thinking of Marx. The capitalist world as seen by Marx was certainly disenchanted with only the possibility of revolution offering enchantment.

Looking forward to Durkheim (1858 – 1917), a contemporary of Weber's, modern society, having lost traditional social and religious ties, provides little moral guidance. This loss results in 'anomie' (Durkheim, 2006 [1897]), or derangement, arising from a dissonance between individual actions and social ideals and practices. Anomie could have devastating effects on individuals, including suicide, which had previously been examined as a purely internal human matter.

Finally, turning to another contemporary of Weber, Sigmund Freud (1856 – 1939) viewed civilization as broadly suppressing human desire.

However, despite the often negatively conceived effects of suppression, Freud mostly favoured disenchanted science and the secular, which enabled modern man to rationally master the unconscious-instinctual life (Whitebook, 2002).

While Rousseau and Durkheim look back at times to an age when things were purer and simpler, and Marx holds out for post-capitalist enchantment, Hobbes and Freud are mostly drawn to the power of modernity to master life.

While some of these influences can be seen to be present in Weber, what coheres most between Weber and these other social theorists is the existence of dichotomies – between the state of ‘warre’ and the civilizing effect of political institutions (Hobbes); between the forest and the modern condition (Rousseau); between individual actions and social practices (Durkheim); between alienation and revolution (Marx); and between civilization and human desire (Freud). These theorists helped to lay the foundation for the dichotomy between enchantment and disenchantment that Weber will be seen to describe. Michael Saler calls this a ‘binary’ approach to enchantment, where enchantment may be seen as a ‘residual, subordinate “other” to modernity’ (Saler, 2006, p695). Modernity, by this definition, separates itself from enchantment.

However, Saler suggests that an ‘antinomial’ approach is a closer description of empirical reality, where ‘fruitful tensions’ are seen to exist. Such will be seen to be the case in WHM, with living plants often enchanting herbalists and also acting as uniting agents enabling diverse influences to sit comfortably side by side.

Max Weber, and his observations on the displacement of enchantment by rationalization, will provide a starting point. However, the ‘hidden entryways’, which raise the possibility of non-human agency, question Weber’s inflexible position on the lack of enchantment in modernity. Bruno Latour will then help us to consider a different conception of agency, which has gained academic respectability over recent decades. While Latour and his Actor-Network Theory colleagues can explain some

of the things that go on in WHM, they cannot explain the specificities of the relationship between herbalists and herbs that have been seen in some of their beginnings. Thus we will turn to David Abram to suggest that the sensuality of plants may play a role, not only in the beginnings of herbalists, but elsewhere in WHM. However, while Abram sees few opportunities for enchantment outside of indigenous cultures, Bronislaw Szerszynski sees new forms of enchantment powerfully present in (post) modernity, and is drawn upon to argue for the continued influence of the 'sacred' in nature, including in WHM. Finally, Jane Bennett will be arrived at to suggest a definition of the enchanting power of herbs in WHM and to argue that both the 'traditional' and 'scientific' realms of WHM provide opportunities for such enchantment.

Max Weber, disenchantment of the world and the profession of Western Herbal Medicine

Weber famously lectured in 1917 and was later published in 1919 (Weber 2004; Cascardi 1992) that 'the fate of our times is characterized by rationalization and intellectualization and, above all, by the disenchantment of the world. Precisely the ultimate and most sublime values have retreated from public life either into the transcendental realm of mystic life or into the brotherliness of direct and personal human relations. It is no accident that our greatest art is intimate rather than monumental' (Weber 2004 [1919], p30). 'Disenchantment of the world' is a phrase that Weber borrowed from the poet, philosopher and playwright Friedrich Schiller, who described how modern fragmentation follows from the specialization of knowledge and experience (Angus, 1983). Sherry (2009) points out that 'disenchantment' is a poor translation of 'entzauberung', and that a better translation is 'losing its magic'. Notwithstanding translation difficulties, the sense behind the phrase as used by Weber is that the world seems to have lost some of its attraction and seems somehow dull and lifeless. The 'disenchantment of the world' describes a mass of social, intellectual and other forces, which have their origins in the Protestant Reformation, the industrial revolution and the development of scientific knowledge, driving and being driven by

rationalization and its bureaucratic tools. The result is the undermining and decline of religion.

Weber's words are best referred to directly here, when he argued in a lecture given in 1917, that rationalization via science means: 'the knowledge or belief that, if only one wanted to, one could find out at any time; that there are in principle no mysterious, incalculable powers at work, but rather that one could in principle master everything through calculation. But that means the disenchantment of the world. One need no longer have recourse to magic in order to control or implore the spirits, as did the savage for whom such powers existed. Technology and calculation achieve that, and this more than anything else means intellectualization as such' (cited in Sherry 2009, p371-2).

Weber is split as to his feelings towards this disenchantment process. While he refers to this as a loss, he is not nostalgic because it is the loss of an illusion, so is broadly welcomed in humanity's search to become master of its own destiny. Yet, at the same time, he describes this process of rationalization as being an "iron cage". The cause of this sense of constriction for Weber is that scientists are not concerned with answering Tolstoy's questions, namely "What should we do? How should we live?" Religion has lost out to Science, and in this victory meanings are replaced by scientific knowledge and the means-ends pursuit of material interests (Gane, 2005). Thus, scientific progress and human progress are not necessarily seen as being one and the same.

Sherry (2009) points out that Weber brushes aside Baconian and Newtonian thought, which prefigured Einstein's position that the task of a scientist is to trace out the signs of His wisdom in the Laws of Nature. Instead Weber separates out mystic experiences with their concomitant emotions from processes of rational thought, missing the opportunity to see wonder in rational knowledge, as contemporary scientists such as Dawkins (1998) propose, and which will be addressed later when we come to Jane Bennett (2001).

For Weber rationalization could be seen in the dominion of science over trust in religious authority, as well as in the emergence of bureaucratic procedures that enabled the implementation of rational programs.

Although Weber applauded the efficiency of bureaucracy, he regretted the way that it mechanized life and restricted the freedoms of the individual.

However, Ritzer (1975) points out that Weber also contributed to debates on the professions, particularly in his recognition that professionalization, like bureaucratization, is an aspect of the rationalization of society.

Although Weber suggests that it was particularly Calvinism that was instrumental in the genesis of the professions, he also suggested that professionalism was important in the development of rationalism in the Occident: 'This worldly asceticism as a whole favours the breeding and exaltation of the professionalism needed by capitalism and bureaucracy. Life is focused not on persons but on impersonal rational goals' (cited in Ritzer, 1975, p628). Weber sees bureaucracy as being a necessary (if life-suppressing) requirement for the efficient implementation of rationality by professionals. He says: "the bureaucratization of all domination very strongly furthers the development of 'rational-matter-of-factness' and the personality type of the professional expert" (cited in Ritzer, 1975, p 632).

The understanding that rationalism can be seen in the development of professions allows the argument that rational goal-oriented behavior may be seen in the actions of the professions. Furthermore, when professions engage positively with science, as the arch-rational sphere of life, and with bureaucracy, as a place where rationalization takes place, they are more likely to achieve their goals.

The case of the profession of WHM will be considered in this context. We have already seen how the profession of WHM from the mid 19th century has been tenaciously determined in its objective to gain political recognition by statute, and that this was promised by the Government in 2011, although it is proving slow to deliver. The profession's engagement with science, as another element of rationalization, has also been described above in the training, journals and pharmacopoeias of the profession. While individual herbalists do not have to engage with particularly high levels of bureaucracy, other than completing annual CPD forms and tax returns, there is certainly much bureaucracy present

within the profession of WHM – seen, for example, in the exam boards and course reviews for the University delivery of WHM degrees; in the various committees of the NIMH and other professional bodies; in the work of umbrella organizations like the EHTPA that leases between government organizations and individual professional bodies; and in those suppliers of herbal products to herbalists that have chosen to seek Good Manufacturing Practice accreditation.

Let us examine how Weber looked at the case of the profession of the priesthood. This will be useful in that the profession of WHM has always sought to separate itself from the label of the ‘quack’, ‘witch’, ‘charlatan’ or unqualified practitioner, just like religious authorities have always sought to distinguish themselves from ‘magicians’ or ‘sorcerers’. For Weber it is the rational and theoretical training of the priest that does the most to distinguish him from the sorcerer. Ritzer (1975) sees 11 characteristics of the priest given by Weber that could be applied to professions generally. These include: power, i.e. monopoly over work tasks; doctrine, i.e. specific ring-fenced knowledge; rational training; vocational qualification; specialization; a full-time occupation; the existence of a clientele; salaries; promotions; professional duties; and a distinctive way of life.

Of these characteristics it is the lack of the first one – of the power to have an exclusionary closure around its activities, that has driven WHM, in the face of constant threats to its existence, to move via professionalization and engagement with science, towards the establishment of a profession that has a room of its own in modernity. From this perspective, the profession of WHM seems to be engaging with Weber’s modernizing force of disenchantment, that has rationalization at its core. However, as mentioned, Weber also senses that these processes cause isolation. Braun (2011) argues, drawing on Berman (1981), that this isolation stems from an unmet human need for ontology, which is also described as being a spiritual need to have a ‘felt sense of the sacred’. It is this sense of ontology - of closely knowing existence, which is found in the hidden entryways of herbalists, and which may be

called 'enchanted'. And it is this that may be further found in the later narratives of herbalists and in WHM.

Bruno Latour, relational agency, explaining 'hidden' entryways, and the disenchanting hybrids of Traditional Herbal Registrations

The 'enchanted' crossings of herbalists with herbs that were described in the hidden entryways raise the question of the agency of herbs. Being called by herbs, talking to trees and trees talking back, if we are to avoid anthropocentric psychological explanations, all imply some sort of agency in nature that is difficult to address. How can we conceive of the enchanting agency of herbs in the hidden entryways without attributing human intentionality and language use to them? This question is only possible at all because there is a recent history of non-human agency being addressed, particularly in eco-feminism, notably in the seminal work of Donna Haraway (1991). This has progressed from concepts such as 'cyborgs' of and has most recently coalesced around the idea of the 'posthuman' (Braidotti, 2013). It is also possible because, as noted by Knappett and Malafouris (2010), the permeable membranes between objects and people have a long history of being described by anthropologists. This can be seen particularly in Mauss's study 'The Gift' (2002 [1954]), and later in Appadurai's (1988) 'Social Life of Things' and later still in Susan Reynolds Whyte's 'Social Lives of Medicines' (2003). However, such a question is mostly possible due to the influence of Actor-Network Theory (ANT) in general (Callon, 1986; Law 1992; Law and Hassard, 1999) and the General of ANT, Bruno Latour (2007; 1993; 1999; 2004), in particular, that has taken the centre ground in addressing non-human agency over the last 30 years. In ANT agency is not equated with intentionality and is dispersed in relational networks of people, concepts and things with there being no person, concept or thing that is given analytical primacy. All these agents or 'actants' are the products of the networks they are in, not vice versa.

However, while scallops and automatic door openers can be powerful in ANT, if they were objects that you wanted to spend time with or learn from or communicate with, ANT would not be able to help your

understanding of how or why. Harman (2015) argues that Latour, in asking us to follow the assembly of relations, is heading towards us making all objects equivalent. 'Latour gives us a democracy of nature and society, ruled by a sovereign called Relations. A half-step to the side of this theory is a wider democracy, in which Relations have to yield half of their power to the echoing, resounding, vibrating, unexpressed metaphysical reality of objects' (p7). It is this 'vibrating' reality of herbs that has not been forgotten by herbalists and that may be seen in the hidden entryways.

Despite this limitation, using an ANT framework, Jones and Cloke (2010) suggest 4 ways that trees, and other non-humans, can be seen as having agency: as routine action – trees reproduce and spread; as transformative action – they can grow in unexpected places and forms; as purposive action – their DNA has an unfolding plan; and as non-reflexive action – where trees have the 'capacity to engender affective and emotional responses from the humans who dwell amongst them' (p81). It is these responses that will be considered more fully later, when we discuss how Jane Bennett can be helpful.

However, for the moment, Latour can help us to understand three things. Firstly, why are such enchanting encounters hidden from view? Latour (1993), using Shapin and Schaffer's (1985) 'Leviathan and the Air-Pump' as his main resource, locates the beginning of modernity - the 'Modern Constitution' - very specifically at the time of Thomas Hobbes and Robert Boyle in the mid-seventeenth century. Latour argues that 'the Moderns' were born when a particular 'purification' was instigated – when knowledge was split between knowledge of people and knowledge of things, with Boyle and Science and Objects and Nature on one side of the man-made fence, and Hobbes and Politics and Subjects and Society on the other. This purification may be summarized as the Nature/Culture divide, with Nature addressed by Science and Culture addressed by Politics. Pickering (1994) argues that Latour's (1993) 'We Have Never Been Modern' is an attempt to explain the grip of the human/non-human dualism on our imagination, originating with Boyle's separation of Nature from the speaker, and with Hobbes' theorizing of social order

independent of material circumstances. Thus, with Nature separated from Culture, modernity was born. However, Latour's second point is that 'hybrids' are produced out of this purification: modernity's demand for sharp demarcations between nature and culture means that more things necessarily become hybrids.

Latour gives the ozone layer as an example of a hybrid, with it being understood through diverse actors including gases, the sky, upper-atmosphere chemists, meteorologists, measurements, heads of state, the rights of future generations, desperate patients and industrialists. Thus the ozone layer, like any 'thing' is the product of relationships and associations rather than existing a priori. Even though the Modern Constitution attempts to produce only Subject or Object, Culture or Nature, which can be dealt with either by Politics or Science, it is hybrids that proliferate. As Latour says:

'Everything happens in the middle, everything passes between the two, everything happens by way of mediation, translation and networks, but this space does not exist, it has no place. It is unthinkable....' (1993, p37).

While modernity is defined as this process of purification and hybrid creation, the former process is valued and claimed, while hybrids are discounted and denied. Therefore, as Bennett (2001) observes, modernity, a paradoxical combination of claims, presents itself as a shiny, consistent and enlightened alternative to a messy world, with the superior moderns not making the primitive mistake of muddling up the human with the non-human, the natural with the cultural. Hybridization must be swept under the carpet to avoid accusations of an archaic animism. Thus the hidden entryways of herbalists are, well... hidden. This is particularly easy to do because the networks that enchanting experiences lie on are short ones, generally just involving herbs and herbalists.

While this may explain the hidden nature of some of the entryways, Latour's concept of 'purification' can also help to explain a second observation: how herbalists, as part of culture, have been assigned to the political sphere of near-regulation, as described above, where the herbs

themselves are barely visible, while herbal medicines, as part of nature, has been 'normalized' to become 'a distinct object of expert bodies of knowledge' (Wahlberg, 2008), also described above.

Latour's observation that while modernity proudly purifies, it is hybrids that proliferate, can help explain the third observation: that consternation occurs in WHM when hybrids come into the open. Hybrids made up of shorter networks are likely to be less visible than those in longer networks. In the case of WHM the herb-herbalist network found in the hidden entryways is a short network and less visible than the longer network that makes up Traditional Herbal Registrations (THR): non-enchanting herbal hybrids that mix both nature and culture. We will take the case of St John's Wort as a THR. A brief review of THRs is necessary. However, as mentioned previously, since 2011 the EU's Traditional Herbal Medicinal Products Directive (THMPD) has been in operation requiring 'medicinal herbs' to be sold as THRs. However herbs are also sold as 'food supplements' with it being the responsibility in the UK of the MHRA to authorize the THRs and to distinguish between products that should be THRs and those that are food supplements, with this being done on a case-by-case basis. THRs have to have been in safe use for 30 years, including at least 15 years in the EU. Clinical evidence for a particular herb is not assessed by the MHRA in the approval process. THRs are to be used for minor self-limiting conditions without the supervision of a doctor. The EU motivation was to improve quality, provide consumers with accurate information and to harmonize practices across the EU. THRs have a less costly registration process than drug medicines and it is proof of safety, including in the manufacturing process, and also proof of traditional use that are required of each product, rather than efficacy. Instead, efficacy is plausible on the basis of its long traditional use.

Schwabe is one of the leading suppliers of THRs in the UK. They have a St John's Wort product called 'Karma Mood'. This product is sold in a blister pack with a THR registered trademark logo as well as braille lettering and an information leaflet inside. It contains a product information leaflet (Medicines and Healthcare Products Regulatory

Agency, 2015), giving information on: 'What is in this leaflet' before describing 'what this product is and what it is used for' (weight of the extract and its equivalent to St John's Wort, and solvent details); 'Before you take this product' (contraindications for its usage that include 'suffering from depression' and specified drug medicines); 'How to take this product' (dosage and what to do in case of overdose or missing a dose); 'Possible side effects'; what they are and how to respond to them; 'How to store this product'; and 'Further Information' (non-active ingredients and contact details). The leaflet is very similar in structure and layout to the leaflets given to patients with prescribed drug medications which also cover 'What is in the leaflet', 'What you need to know before taking...', 'How to take...', 'Possible side effects', 'How to store...' and 'Contents of the pack and further information'. Additionally, the use of a blister pack, THR logo and the braille add to the 'authority' of the Karmamood, although the design of the Karmamood packet does include a picture of the herb.

So what makes Karmamood a Latourian hybrid? In the terms of Latour, the purification of nature from culture has not happened in Karmamood. It is a 'medicinal product' (Nature), regulated by the MHRA, the government agency that also regulates drug medicines, but its use is based purely on the safety of 'traditional use' (Culture). Its production is governed by technical standards (Science) that arose out of EU legislation to harmonize trade, improve quality and protect consumers (Politics). Furthermore, there is a much larger evidence base for St John's Wort's use in 'mild to moderate depression' rather than 'low mood and mild anxiety'. However, because depression is not a 'mild, self-limiting condition', it cannot be recommended for the use for which there is most evidence. So Karmamood, with its network of herb farms, blister packs, braille, official MHRA approved THR logos, 'traditional use' claims, EU legislation, German phytomedicines companies, distributors and retail outlets can be seen as a bit of a hybrid, created out of this network. This network, however, is longer and more visible than the herb-herbalist hybrid or crossing of the hidden entryways. The lengthened network has brought it greater attention and has antagonized some,

particularly those who want herbal medicines to be approved by the same standards as drug medicines and insist that traditional use is no indication of efficacy. Thus David Colquhoun, professor of pharmacology at UCL, in a TV interview, asks ‘Why should there be different rules for herbals, which after all are just pharmacological agents of a particular subgroup, and for other ones? It’s crazy to have two systems’ (Colquhoun, 2011a).

He also says (Colquhoun, 2011b): ‘There is no need to supply any information whatsoever about whether they work or not. That itself is very odd, given that the MHRA’s strapline says: “We enhance and safeguard the health of the public by ensuring that medicines and medical devices work and are acceptably safe.” In the case of herbals, the bit about ensuring that medicines work has been brushed under the carpet.’ Mixing culture and nature, or tradition and science just doesn’t make sense to moderns.

David Abram and the senses of Western Herbal Medicine

Although David Abram doesn’t use the word ‘disenchantment’ he can be seen to be telling a similar tale to Weber in that they both identify a loss in modernity. Abram (1997) highlights the importance of the senses in understanding the relationship between humans and the natural world and it will be seen in this thesis it is the senses that are central to understanding the enchantment present in the hidden entryways and later narratives of some herbalists.

Abram explores shamanic traditions. He argues that the shaman’s communication with spirits is better seen as communication with other-than-human consciousness in the natural world and not communication with some transcendent world ‘out there’. The shaman’s role is to serve as an intermediary between the human and non-human. “It is not by sending his awareness out beyond the natural world that the shaman makes contact with the purveyors of life and health, nor by journeying into his personal psyche; rather, it is by propelling his awareness laterally outward into the depths of the landscape at once both sensuous and psychological...” (p10).

It is this that will be further explored in three of the case studies below. Three herbalists will be seen to know herbs in different ways, including by tasting them, inhaling aromas while herbs are being decocted in water, and by working with them physically. Their sensual ways of knowing can be seen as being aligned with such a view of what a shaman might be.

Abram's further says that it is anthropology's inability to see the shaman's allegiance to non-human nature that has led to the situation where it is possible to enroll in 'shamanic' workshops as an alternative form of therapy, where in fact the primary role of the indigenous shaman is to keep the human community and the natural landscape in balance, and that this requires sustained exposure to nature. While herbalists may be less exposed to nature than shamans, in different ways they do spend much time with their plants, with the importance of taste, smell and physical labour being explored in the cases below.

Abram's work is situated in the phenomenology of Edmund Husserl and Maurice Merleau-Ponty, particularly in its recognition of the importance of direct experience, and the reciprocity of perception. Husserl brings to attention the real world, or 'life-world', as being a collective field of experience, while Merleau-Ponty asserts that the self is not independent of the body. At the core of Abram's writing is the ability to become aware through the senses, with this perception being a 'reciprocal interplay' between perceiver and perceived. Were such 'interplays' brought to awareness in the early, enchanting, hidden entryways of the herbalists discussed above? Being 'called' by plants can be seen as necessitating such reciprocity.

Abram suggests that we should simply let things be alive, 'just allow that things have their own agency, their own influence upon us, whether it be a slab of granite, storm clouds, a stream, a raven, a spider' (cited in London, 2015). Could this equally apply to a herb? If the agency of herbs is seen in the entryways of herbalists, is it also present in the rest of the narratives?

Abram's has also developed an argument that alphabetic language and writing has the power to separate humans from the experiential

relationship to the 'more-than-human' world. This will be explored later on in this thesis when we look at how the place of the senses in WHM may explain the position of texts in WHM.

While Weber and Abram can both be seen to be telling disenchantment tales with their concomitant senses of loss, Bruno Latour sees wonderful, yet rather flattened and equalized hybrids nearly everywhere. We now turn to, firstly Bronislaw Szerszynski and then Jane Bennett, who suggest that there are plenty of opportunities, including those found in cross-species encounters as well as in science, to trace the more visceral presence of enchantment in modern life.

Bronislaw Szerszynski, enchantment and the axes of Western Herbal Medicine.

Bronislaw Szerszynski (2004), unlike Weber and Abram, sees enchantment as being powerfully present today. At the beginning of his argument Szerszynski suggests that the very act of rendering the world devoid of spiritual significance actually entices new forms of enchantment. He asks us to consider some examples: 'A young protestor locks himself to the top of a swaying tree in order to prevent the construction of a new road and the consequent destruction of an area of native woodland. A middle-aged woman sees an acupuncturist to unblock the natural 'healing powers' of the human body. A farmer walks out into his fields with a canister of herbicide, determined to eradicate the weeds that are 'invading' his crops. A woman, still smarting after an argument with her partner, stops her car at the roadside on a deserted mountainside to take in the view, and feels able to get things back in proportion. A botanist collates all the data from his experiments, and tries to discover the law that underlies the different patterns of growth he observes in his plants. How does nature appear in these examples – as 'dead matter' of a mechanized world-view...? Or is it sometimes an object of absolute intrinsic value, a healing energy, an evil to be subdued, a calming presence, or an obeyer of laws? And if so, what does this say about ideas of nature's disenchantment?' (p7).

While it is the task of this thesis to trace what is in the entryways of herbalists through their narratives and into WHM, Szerszynski's main focus is to address the sense that contemporary attitudes to nature and technology have religious qualities to them. Religious meanings do not simply evaporate over time but they change. Thus both Szerszynski and this thesis follow threads, with the former being concerned with historical narratives and the latter with individual narratives. The Gaia hypothesis and the Internet, for example, are seen as possessing religious meanings. And both cutting edge science and experiential knowledge of plants will be presented as enchanting in WHM.

Szerszynski (2004) suggests that: 'As Weber himself put it in a different context, under conditions of modernity "the many gods of old, without their magic and therefore in the form of impersonal forces, rise up from their graves, strive for power over our lives and begin once more their eternal struggle amongst themselves"..... I have been similarly suggesting in this book that in contemporary society we can see not a decline but a profusion of the sacred; dispersed across the social, natural and technological landscape, the sacred becomes feral' (p171).

Szerszynski traces the 'long arc of transcendental religion' and argues that in the 'primal sacred' of historically indigenous cultures (and arguably in indigenous contemporary cultures) an archaic form of the sacred emerges, with sacred power located in things, places and people – a horizontal axis. However, with the arrival of Judaism and Christianity there comes the transcendental axis of the 'monotheistic sacred', which is located outside this world – a vertical axis. Supernatural power is banished from this world, which is left purely empirical. With the arrival of the 'Protestant sacred' God becomes both infinite and involved with individuals and nature such that life itself became the location of the sacred. And with the 'modern sacred', the transcendental axis is 'pulled' into the empirical world, producing an immanent ordering of the sacred, seen in the sacred nature of life itself grasped via Enlightenment reason. The most recent manifestation of the sacred is the 'postmodern sacred', where multiple orderings (a 'multiplex reality') of the previously discrete 'sacreds' are possible and are grounded in very individual subjectivities.

Szerszynski follows the trajectory of the sacred through different epochs and this thesis follows the trajectory of enchantment through narratives and into WHM. The sacred and enchantment have in common that they are not limited to either nature or culture, science or society, but they spread out along trajectories that can be followed.

Thinking about medicine, Szerszynski argues that in the Christian era there are two models of healing, a vertical one based in dependence on saints and sacraments, and a horizontal one with pre-Christian origins, founded on the maintained connections with the natural and social environment. With the Protestant sacred there came a more cognitive approach to the self and health, including rational self-care and the validation of inner life stories.

In the hidden entryways of herbalists a horizontal axis is visible where power is located in the herbs and nature. Such horizontal axes of relationships with the natural environment will also be seen in the subsequent narratives of herbalists. On the other hand, a vertical axis of dependence may be seen in WHM in, for example, the growing power of 'evidence-based medicine' to inform clinical decisions and the reliance on professionalization and possible forthcoming legislation to be free to practice. The location of the sacred in individual subjectivities in the postmodern sacred can also be seen in the importance that all herbalists in this study attribute to facilitating the patient to be able to 'tell their story' as a therapeutic endeavor, and which will be born out in several of the cases below.

Just as religious meanings don't simply evaporate over time but change, maybe the enchanted early experiences of herbalists do not simply evaporate, but are still somehow present in the narratives of herbalists, and hence in WHM.

Jane Bennett, modern enchantment and the sensual affective energy of Western Herbal Medicine

We now turn to Jane Bennett (2001) who, like Szerszynski (2004), sees modernity as providing multiple opportunities for enchantment. Bennett

writes with infectious and backed-up optimism, in opposition to the pessimism of writers such as Berman (1981) who yearn for re-enchantment.

Bennett (2001) summarizes Weber's notion of rationalization, pointing out firstly that the suffix ION indicates that it is never complete. Rationalization is seen to promote accuracy, consistency and reliability over the vague, the novel and extreme, alongside which there is a concern with a theoretical mastery of reality. Thinking becomes instrumental in that calculations lead to a practical end. With rationalization, tradition is replaced by calculation. In this process, it is largely science that reduces the world to materiality, which in the 'disenchantment tale' is the opposite both to spirit and to meaning. Bennett describes how the disenchantment tale of Weber shares six elements with many other versions of the tale that continue to hold cultural currency: there is a bygone era when God lived in Nature, agency was widely distributed amongst living animals, humans and plants; there is a desire to rediscover this cosmology; there are only two binary incompatible options, namely an enchanting cosmology or a disenchanted materialism; the processes inherent to disenchantment, namely rationalization, secularization, materialization, scientization and bureaucratization are said to have speeded up; loss of meaning causes human suffering; and rational selves look outwards towards mysticism and in other directions for true satisfaction.

Indeed the 'disenchantment tale' may be seen as being retold within the tale of WHM. Thus the bygone era of herbal medicine was when less time was spent studying curricula and more time in contact with plants; the desire to rediscover this cosmology has lead more herbalists to look to experiential methods of knowing plants; the dichotomy of 'science' and 'tradition' suggests that each of these paradigms are incommensurable; recent changes in education, the dominance of the scientific investigation of herbs in research studies and the regulatory framework for herbalists have snowballed over the past 15 years; herbalists possibly understand less about herbs than they used to; rational herbalists look to other traditions such as Chinese Medicine or Ayurveda for deeper satisfaction.

In talking to herbalists all these elements of the tale are present somewhere in WHM today, and most of them will be seen to be present somewhere in the cases below. However, it is also true that there is another side to this story, one that involves enchantment being found in unexpected areas of WHM, not just by looking 'back' to a bygone era. Bennett (2001) suggests that enchantment and disenchantment can exist side by side. For Bennett enchantment offers opportunities for a new ethics and a new understanding of materiality. To be enchanted, for Bennett, is to 'be struck and shaken by the extraordinary that lies amid the everyday' (p4). This 'includes a temporary suspension of chronological time and bodily movement' (p5). It is 'to be simultaneously transfixed in wonder and transported by sense, to be caught up and carried away' (p5). It is a 'surprising encounter' and a feeling of being 'simultaneously charmed and disrupted' (p5).

The hidden entryways of herbalists reveal moments of enchantment that gel with these definitions. Although the narratives did not capture long descriptions of these moments, if the reader puts herself in the position of these herbalists, they are likely to point to powerful feelings, possibly now lodged in the herbalists' amygdalae. Trying to understand what trees have to reveal by listening to the wind pass through them, being involved with plants without being involved at all, the smell of yarrow, knowing things without having been taught them, being in a pram and wanting to do something of value, being called by Red Deadnettle, being called by grass while still in nappies and being talked to by trees are difficult to forget.

In an interview, Bennett (Khan, 2012) argues that enchantment may be indispensable to ethical action and that it does this through providing a fuel or spark of 'aesthetic-affective energy' (p52). The enchantment that the current thesis seeks to investigate and follow in WHM should be regarded as more 'sensual' than 'aesthetic' in order to emphasize the primacy of the senses. It is also 'affective' in that this sensuality influences what is felt and that this has consequences for herbalists. The sensual is affective and is also energetic - it spreads outwards. Not in all directions but in some, which the cases below will describe. As Seigworth

and Gregg (2010) argue, 'Affect arises in the midst of *in-between-ness*: in the capacities to act and be acted upon.....affect is found in those intensities that pass body to body (human, nonhuman, part-body, and otherwise),....Affect, at its most anthropomorphic, is the name we give to those forces.....that can serve to drive us toward movement, toward thought and extension.....Affect is in many ways synonymous with *force* or *forces of encounter*' (p1-2, emphasis in the original).

Hardt (2007) suggests that affect is not simply emotions or feelings. Rather, affect embraces the body and the mind, the senses and thought. Grossberg (2010) sees the concept of affect as a 'magical way of bringing in the body' (316). Wetherell (2012) suggests that affect is not limited to the unconscious and the automatic, and is not separated from discourse that is characterized as conscious and deliberate. Rather, affect is a dynamic blend of bodily responses, feelings and thought processes as well as verbal and other communications. Affective life is a crossing of all of these. It is this sort of affective life that the enchantment of plants and herbal medicines will be seen to engender in herbalists. Affect is passed on, 'forming what can seem like pulses of energetic relation' (Wetherell, 2012, p142).

Thus, enchantment can be seen as a 'sensual-affective energy'. On an individual level it is what matters most to people. While it is not the focus of this thesis to understand how enchantment 'works' in individuals, Milton (2002) has developed a framework for how individuals relate to nature, showing how emotions may operate in ecological relations rather than simply in social ones, with emotions being brought forth by interactions with nature. In opposition to conventional Western assumptions, Milton, like David Hume and William James, does not see thoughts and feelings as separate processes. Rather, emotions may be a learning mechanism, and hence perfectly compatible with rationality. While Milton's focus is purely on the human, this thesis aims to look beyond the human – with living plants and herbal medicines possessing more agency than is allowed by taking a purely human-centric approach. For Bennett, enchantment may be found in multiple sites, including modes of communication among non-humans and complex systems, in

the teleological world of Paracelsus as well as in the amazing world of interior reason invented by Kant. Drawing on both Haraway's (1991) cyborgs and Latour's (1993) Nature/Culture hybrids, Bennett discusses cases of cross-species encounters that provoke wonder in herself. Bennett prefers "crossings" to "hybrids" to reinforce the notion that new things are brought into being. Thus she considers metamorphosing creatures such as Catwoman, the interests of the small creatures in the film 'Microcosmos', the pig star in Babe, the machine that beat Kasparov at chess, Deleuze and Guatari's 'organless body', and children playing animal games. Bennett argues that these crossings act as sites of enchantment and provide an opportunity to cultivate an "ethical sensibility" towards animals, vegetables and minerals.

Where Bennett speaks to WHM is in her recognition that while enchantment may be found in the life of Renaissance physician Paracelsus, where the world was seen as divine prose, it is also found in the Kantian faculties of the mind. Bennett describes Paracelsus as being a Christian animist who combined the idea of a heavenly creator with that of plants being powerful agents whose virtue was visible in the plant. This may sometimes be seen in WHM today, although with less Christian overtones, and will be found in one of the case studies below. For Kant, however, the reading of signs leads to errors, and he prefers to engage interior reason, which Bennett sees as the first wonder of the Kantian world, with the second wonder being nature itself. Rather than modernity embracing apparent contraries such as rationality and wonder, Bennett argues that rationality *itself* can be full of wonder and enchantment. And certainly the world of WHM is one that has adopted the rationality of science, both in its Herbalism 2.0 form and in its engagements with various trajectories of cutting edge and science, as will also be seen in some of the cases below.

Jane Bennett is not alone. Historians are now suggesting that modernity is not disenchanting. Michael Saler (2006) suggests that postmodernism's acceptance of the messiness of reality and the demise of grand narratives have helped avoid the binarisms of the past such that enchantment and disenchantment can be found together. Saler takes an

'antinomial' approach to enchantment, where modernity is seen to be 'Janus-faced', full of 'unresolved contradictions and oppositions' (p700). If we look back to those social theorists who pre-dated Weber or who were his contemporaries and who separated a disenchanted modernity, or hope of one, from what came before, it is possible to discern in their work the coexistence of exactly what they sought to separate. Thus, as Saler (2006) notes, Marx's writings are peppered with 'metaphors and similes of enchantment' (p698) such as specters, ghosts and commodity fetishization, thus maintaining the presence of the religious and even the pagan in modern thinking. Turning to the question of how modern society can remain moral in the face of the loss of tradition, Durkheim (2014 [1893].) develops the concepts of 'collective consciousness' and of the State as an organ of social thought. The idea of a shared consciousness with a political institution as its reflective centre can be seen to resonate with the enchantment of the pre-modern world, although it is now politics that is deified. Turning to Freud, while he championed the power of modern civilized and rational man to master human desire, he also worked with what may arguably be seen as the enchanting concepts of transference and the unconscious. These are powerful agents that evade easily verifiable disenchanted explanations.

Thus, as both Jane Bennett and Bronislaw Szerszynski suggest, the past is powerfully present. It is difficult to get away from enchantment.

Turning to science, Saler argues that modern science has become a 'central locus of modern enchantment' (p714). Although science may not provide the transcendent meanings that religion used to offer, it still provides wonder, by 'embracing the enchanting possibilities inherent within contingent and provisional meanings' (p 714). The absolute enchantment of religion may have gone, but imagination becomes a 'source of multiple yet finite meanings that enchant in their own way'(p714). They 'delight but do not delude' (p714).

Another writer who sees wonder in science is Philip Fisher (1998). In his examination of the history of attempts to explain rainbows, he follows Descartes's explanation of why the bands of the rainbow need to be around 40 degrees, suggesting that scientific explanation can induce the

wonder of seeing a rainbow for the first time. Geometric shapes with their lines and arcs may be enchanting. He argues that the experience of experiencing a rainbow is always new and wonderful despite science having explained them. In fact it is 'unreflective and immediate' (p40) wonder that motivates the search for explanations. The surprise of wonder easily leads to thinking. What is potentially even more wonderful about rainbows than the rainbows themselves is his observation that they exist only in the way that we see them due to the four-way relationship between human anatomy and physiology and weather patterns and light. It is human eyes, made and positioned as they are, that allows humans to see rainbows as we know them. An enchanting thought that is not possible without a scientific explanation.

A contemporary scientist who published at the same time as Fisher is Richard Dawkins, who also considers rainbows. He argues that 'the feeling of awed wonder that science can give us is one of the highest experiences of which the human psyche is capable' (Dawkins, 1998, p11). He seeks to oppose Keat's view that Newton had destroyed all the poetry of the rainbow by 'reducing it to the prismatic colours'. For Dawkins, science is inspiration. Wonder inspires science. He points out that Newton's 'unweaving of the rainbow' led to spectroscopy, a key technological development without which our understanding of cosmology would not have happened. It is the work of Einstein and Hawking that causes his heart to leap.

Another author who sees the disenchantment of science as being a tall story is Peter Watson. For Watson (2014) the timing of Weber's remarks are crucial. Weber gave his lecture during the smoke of WWI. Watson points out that within two years after the cessation of hostilities Eddington confirmed the existence of relativity that started the road to quantum mechanics and the wave particle duality. The big bang theory also has its origins in the 1920s. Watson suggests that had Weber lived beyond 1920 he would have changed his mind on the bond between modernity and disenchantment.

Pels (2003) suggests that pre-modern enchantment and the modern rationalist are myths that require empirical scrutiny and that such

research can explore the magic that is peculiar to modernity. Pels argues that while early pioneering anthropologists such as Ruth Benedict and Bronislaw Malinowski suggest that political oratory, advertising and property are modern forms of magic, that a closer investigation is required into how magic 'belongs' to modernity. Looking to Weber himself, the architect of the disenchantment thesis, Pels suggests that Weber's disenchanted modernity is in fact itself 'haunted by two magicalities' (p29) - the reification (even deification) of national institutions and the enchanted freedom promised by charisma. Thus Jane Bennett, along with Saler, Fisher, Dawkins, Watson and Pels, suggest that things are more complex than a simple following of the disenchantment tale might tell. And that is certainly the case in WHM, as we shall see.

The implication of these authors for WHM is that enchantment, a sensual-affective energy that herbalists draw from, as well as being present in the hidden entryways of herbalists 'crossings' with plants, may also be found elsewhere, both where you expect to find it and where you do not, both within more 'traditional' and more 'scientific' approaches, which can easily occur within the same herbalist. How these crossings relate to later aspects of the narratives of herbalists and to WHM may change how we come to see WHM.

PART III: CASES

CHAPTER 9: VISIBLE ENTRYWAY HERBALISTS

13 cases of individual herbalists will be discussed. These cases will look at the entryways of the herbalists and how they relate to the rest of their narratives as well as to the ethnographic and other data collected relevant to their practices. The first eight herbalists are those who can be defined as having visible entryways to becoming herbalists, while the last five had hidden entryways. The question of how these 13 cases relate to WHM and beyond will be left for the subsequent discussion.

This section will look at eight herbalists who had visible entryways to WHM, meaning that there is no tension between their beginnings and WHM as an increasingly professionalized and disenchanting practice. We will start with a herbalist who is most clearly aligned with a disenchanting way of engaging with herbal medicines, although he may be enchanted with the science behind his clinical use of them. Then we will move on to three other herbalists who reveal glimmers of enchantment in their relationship to herbal medicines, theory and nature. None of these first four cases highlight enchanting relationships to living plants that are important for them as herbalists, although one of them is arguably enchanted by a particular herbal medicine. However, the second group of four visible entryway herbalists reveal how knowing living plants in various ways is important for their practices and point to another way of understanding aspects of WHM.

TE

Entryways:

TE's mother was a keen gardener:

I suppose when I was younger I was always very involved with gardens because my mother was quite a big gardener and she also, she's Irish, southern Irish, she had quite a, a bit of folksiness in her so she was reasonably interested in things like you can use this for such for such, didn't know a lot about it but was quite interested in what plants did and what kind of plants and she got me very involved with gardens. So I suppose that's where my interest in plants.....

TE had first wanted to be surgeon:

..... my earliest recollection of wanting to have a career was I wanted to be a surgeon and I think that lasted until I was about 11 or 12 and at that stage I decided I wanted to be a lawyer and that stayed with me and I went to university and studied history with the intention of doing a law conversion course afterwards, a post graduate diploma, and that all worked out

TE qualified as a lawyer but didn't enjoy practicing law. As a distraction he looked for an adult education evening class and found one in herbal medicine:

.....and at the end of the three months I thought, actually I really, really like this, so I just started having a look into degrees in herbal medicine and seeing what I could do

Like a GP, but more so

He studied herbal medicine while working full-time as a lawyer. Since qualifying in herbal medicine he has published academic papers on herbal medicine, supervises herbal medicine students in a training clinic, and lectures on clinical medicine, clinical examination and pathology to herbal medicine students. Soon after qualifying he sat in with a herbalist and osteopath who worked in an NHS integrated medicine practice as well as sitting in on GP's consultations. The practice manager approached him about working in the practice:

...she asked me would I be interested in pitching to the GPs basically and saying this is what I offer, would they be interested? So I said, definitely, and I put together a paper which I started off thinking was going to be all the merits of herbal medicine, what I can treat, all of this ... but actually turned out to be basically talking about costs and saying to them, at the moment you probably refer this many people for gastrointestinal medicine through to secondary care. The cost of this to you is such and such. The cost of the prescriptions to you is this much. This is your success rate there, and she helped me put together some of the figures and then I superimposed on that what a herbal medical practice might be

able to offer. I showed them how health cuts could be made and costings could be sorted out and they were happy enough to take it on, so they said yes. So I started working there for two half days a week.

TE sees both NHS and private patients at the NHS practice. The NHS patients are only charged for the medicines, not for the consultations. He initially ran workshops for the GPs looking at the treatment of the patients that they had referred on to him. The GPs refer particular patient groups to TE:

.....and they became more invested in it and now I think they're pretty convinced that if there's a gastrointestinal complaint they will more or less refer to me. So most of the gastrointestinal medicine comes through to me because the results are probably 95% positive for it and probably I think they find it, apart from giving blanket prescriptions of Omeprazole, PPIs and things, they find it quite a difficult, quite, gastrointestinal quite difficult to treat whereas we find it a much, probably one of the easier ones. They also send through a bit of respiratory, some dermatology, quite a lot of older patients who have, who just have quite a lot of complications and need somebody to spend enough time with them to understand what's going on and it, I was, I'm quite pleased that some of them have enough confidence now that they will send through people who have congestive heart failure and complex conditions that they seem to feel happy with me prescribing alongside the existing medications and they're a couple of patients I'm treating for congestive heart failure and it's going reasonably well.....

He explains to patients that herbal medicines are drugs:

....I see quite a lot of patients who aren't interested in taking conventional medications whether I think that reasonable or not. I'm quite prepared to take them myself but some patients just don't want to take drugs and I'm quite careful to explain to them that this is a drug as well but they seem to be much happier taking something that has a natural origin.

While TE has access to his patients' NHS medical records, he takes the cases from scratch and adopts a very orthodox medical approach:

....and this is one of the nice things, they don't expect me to rely on their previous diagnoses. I'm expected to do a separate triage with each patient I see. So diagnostically, although rarely do I differ from what they've come up with but quite often I get sent patients that they're not quite sure what, what's going on with them so I do a whole, I start off, I take the presenting complaint, go through a whole normal case history and do my examinations at the end if they're needed and then I write down all of that into the medical records..... It will put mine up there and it would also go, seen by herbalist, at the top so that when the GP goes in you can just see, OK he's seen by the herbalist on 16th March, said blah, blah, blah, blah, blah, on examination, auscultation of lungs unremarkable, some crackling at bases or whatever. So it's all the, exactly as they would. So I'm expected to adhere to a very orthodox medical model and it's the one I feel more comfortable in and I would, I'm very shy of writing any terms that I don't think that they would understand and by understand I also mean they wouldn't appreciate. So I'd never write down that somebody has a damp condition or a hot condition. I don't really understand how that works myself but I'd keep it very much to clinical language, medical language.

He only includes details of his herbal prescriptions on the NHS system if they might have an impact on the patient's drug medication:

.....only if they, if I think that they might have a crossover. So if I prescribe *Datura* or something that's a bronchodilator and I didn't want them to be potentially doubling up on dosages, I'd write that down. If I prescribe *Hypericum* I will write that in as well and I also check whenever I prescribe one of these that they're not being given it and next time I see them I'll make sure that they haven't been prescribed something in the interim that would mix with anything but otherwise they're not really that interested in what goes into the patient.

TE takes a full case history, but only transfers onto the NHS system what is relevant to the patient's presenting condition. His NHS notes are more extensive than the GPs notes:

So I write, if I, normally my notes are that much on the screen whereas their notes are that much on the screen. So I do do a lot more and I go into a lot more detail. So if somebody comes in, they'll say, the typical GP, somebody comes in with IBS or something, he'll go, patient with history of IBS, says acute symptoms over last two days, no blood or mucus, suggests omeprazole by four, come and see again four days or something, whereas mine will go, patient had, complains of IBS, onset's maybe seven years ago with blah, blah, blah, blah, blah, recently more acute attacks have presented with blah, blah and blah, patient says feels limits daily activities by blah and blah, priorities are, and then I'll go, on examination increased bowel sounds to ileocecal valve, blah, blah, blah, blah, blah. So mine will be much more like that. So mine will actually be more medical than theirs probably in what I write down...

This has led to suggestions by the GPs that he qualifies as a medical doctor:

Because I remember one of the GPs coming to see me because two of the GPs keep going, go back to medical school and qualify fully, and they call it 'fully'.....go back to medical school and qualify fully because the way you work, you'll have so much more freedom because you work like us but you don't have the freedom to prescribe the stuff that we can prescribe and you don't have the freedom to refer and you don't have the freedom to move within the profession. You can't go into secondary care, you can't go into blah, and I do see a lot of that and I thought really, really hard about going to medical school afterwards but I'm not, I don't think I'm going to.....

TE does more physical examinations than the GPs:

....they've got seven minutes. If they, their clinical examination consists of shining a light into the mouth or very

occasionally they might listen to lungs or heart sounds and things but they don't, I, especially if they do a musculoskeletal examination. They will ask the patient to lift to here and then they go, OK that's fine, and you're going, where's the end range of movements.....so it's just not something they do and that's why they love having the osteopaths. The osteopaths are booked up for months in advance because GPs run a mile from any musculoskeletal or neurological problem because they just, it's not their comfort zone at all and similarly I think they're quite like it with the gastrointestinal as well.

Like a GP, but less than

He doesn't see himself as an equal to the GPs in the practice as he is dependent on their goodwill:

I think one has to tread carefully and make sure that you don't ever assume a position that's, that puts you on a, as a peer. I don't know if they would like that or not. I, regardless of what I think in how they relate value wise, I would always, I suppose I'm relatively new to it as well but I always think of it as their territory and I'm very respectful because I'm working in an NHS practice and I'm there by their grace really. So I wouldn't push my luck too far but then I will go and speak to, I had a complicated patient the other day who one of the GPs had seen the day before and when I was speaking to him I asked, is your lower lip normally that shade? And he said, why, what? And he wanted to have a look in the mirror. He said, yeah, it's fine. I said, are you sure? And he said, oh maybe it is a bit bluer than it normally is. And I ... he had this cough and I carried on chatting to him and he previously had a triple bypass..... there were lots of indications that there might be a cardiac problem going on so after I had a chat with him I went through and found the GP and said, you saw this guy yesterday. I read through the notes and I hadn't picked up that you'd seen anything like this, but I just wanted to mention it because I can't refer him through to a cardiologist because I'd have to refer back to the GP but I just said, I, because he's under your care I'd just like you to know that these are the things I observed and I've written them up on his medical notes. So that's as far as I go.....

Relying on (a lack of) evidence

TE says that getting to the point of writing a prescription is difficult due to the lack of good information available on herbal medicines:

I find it a slightly frustrating process I have to say because there are so many herbs that we don't understand.

The main book he uses, by Kerry Bone (2003), is ten years old, which he sees as being out of date. Although TE has a more recent book, (Fisher, 2009), which has lots of research references, he finds it difficult to apply to writing prescriptions. He uses his knowledge of the physiological effects of plant constituents to select herbs:

There's very little decent guidance out there. I try to stick to about five because I think if I dilute them too much, if I put in ten or twenty herbs I just wonder if there's any therapeutic value in what I'm doing and I try to make it, I just look at the actions and I try to make it as specific as I can from what we understand about the herbs. So if I'm treating gastrointestinal, I'm looking at antispasmodic, anti-inflammatory, anything that has an antacid or whatever. So I work on what constituents I understand are in them and what the physiological effect of those is. I have very little outside influence like, is it a certain type herb or does it potentiate this or whatever? It's very, it's quite down the line and I'm sure that's a good thing in some ways but I recognize in other ways it's not such a great thing because it, it's not, it steps slightly outside of the whole traditional healer thing where there's a lot more taken into account but I don't see people as certain types of, people look and say that's a kind of verbena person or something, that's what will benefit them. I don't get that.....

He sees himself as working within a very orthodox approach to herbal medicine, and does not include traditional energetic herbal knowledge in his decision making:

100% pharmacological. I, partly because I don't, I never really studied that as well so I don't really understand it so I don't

know what I'd be doing. I'd probably be throwing somebody's energetics in the wrong direction if I tried.

TE prefers to use herbs based on scientific evidence rather than reputation or traditional use:

I don't use *Calendula* very much at all and I think of it more for what I think we know about it, which is it is antibacterial. We do know it's anti-inflammatory but I think less for the gut and I think more possibly topically and then it has a reputation for lymphatic things which if somebody came to me and they wanted help with lymphatic stuff I might put it in because the choice of herbs is somewhat limited. I'd do what I could but I wouldn't have a huge amount of faith in whether it would work or not because I'd either need to see it written down for me or I'd need to have seen it from somebody or seen it myself to work in order to have confidence in it but I don't, I wouldn't discount something on the grounds that I haven't read it or seen it work. I'm not a complete doubting Thomas.....

In selecting herbs he uses his knowledge of physiology. In his decision-making he uses drug pharmacology to identify particular effects that he requires and then searches scientific papers to identify appropriate herbs:

So I generally, if I'm making a decision I tend to, the herbs are the last things I'd look at. The first thing I look at is what I need physiologically to sort it out. So say I didn't understand what was happening with breast cancer, I'd then research the drugs that they use like tamoxifen and go, OK, so that's having that physiological effect. Can I mimic that looking at herbs if I didn't know another way of dealing with it? So then I'd be going, OK, so I do need to be looking at something that has an affect like a selective oestrogen receptor modulator. So I'd use those and then I use things like PubMed and results from Cochrane reviews, all kinds of stuff. So I use quite a lot of internet stuff.

TE worries that there is not that much to differentiate him from the GPs:

I feel like I, 'emulates' an unfortunate word, I mimic their practice so much that I'm more likely to be redundant in that respect unless the patient asks for me. From the GP's point of view, I'm probably more redundant than somebody who does work in energetics and that adds something that is completely different, something a GP doesn't step into...

Reflection on TE

TE's case locates two entryways to his becoming a herbalist – his mother as a keen gardener, and his childhood desire to be a surgeon. Both of these visible entryways form a thread with the rest of his narrative: in the end he combined plants with medicine in studying herbal medicine and then in practicing and teaching herbal medicine.

This thread, that started with gardens and medical aspirations and continues with practicing herbal medicine in an integrated medicine GP practice, is one that is congruent with the fragmented history of WHM. That history showed that while orthodox medicine has said a long goodbye to herbal medicine, herbal medicine is still attached to orthodox medicine. And from TE we see that his practice of herbal medicine is still wedded tightly to orthodox medicine. So tightly that he, like his particular training, chooses not to engage with more traditional or energetic understandings of herbal medicine. There is no talk of 'hot' or 'cold', of 'trophorestoration' or 'tissue states'. Just as at the end of the 19th century the profession sought to exclude particular elements of their traditional image, such as the astrology of 'Culpeperism', so TE avoids anything except the straight and narrow of a scientific approach to herbal medicine. He uses the principles of orthodox medicine and of evidence to identify herbs that may be useful to his patients. He takes drug pharmacology as a starting point in seeking to identify herbal medicines that might be useful for a patient. He starts with physiology and drugs rather than with herbs.

The case of TE suggests that science is dominant in his practice. He turns to pharmacology, monographs and databases instead of traditional use or 'Herbals'. However, this does not mean that his practice has been

'colonized', 'coopted' or 'mainstreamed' in a Kuhnian takeover of one paradigm by another. TE is very happy to practice this way and he is not doing anything in his integrated medical practice that he would do differently elsewhere. This suggests that his practice is better seen as being 'normalized', with TE being happy to collaborate with, or maybe be enchanted by, science.

TE's engagement with physiology, pharmacology and phytochemistry as starting points can be seen to be part of the 'search for plausibility' that Wahlberg (2008) identified as part of this 'normalization' of herbal medicine. TE seeks to know, through being shown evidence, that a herb works and how it works. He needs to know the pharmacodynamics and pharmacokinetics of herbs as they travel round the body. For this he turns to science.

However, his position also reflects his training at an institution whose curriculum was influenced by Hein Zeylestra and the desire to put herbal medicine on a firm evidence-based footing, one that replaced Physiomedicalism with phytochemistry. At the level of the individual there is little to suggest the co-option of TE's practice, and at the structural level, the engagement with science was something that came out of the profession, rather than was forced upon it, even if not all herbalists agree with the direction that was taken and prefer to forge their own way.

TE has found acceptance as a herbalist in an integrated medical practice. He admits that in some ways he 'mimics' the medical practices of the GPs, and that his NHS case notes are 'more medical' than the GPs. In some ways this is beneficial. Wahlberg (2007) identified that the 'ethical field of battle' for who is a recognized CAM practitioner is today based on qualifications, competency, responsibility, conduct and development, almost irrespective of the particular therapy. Similarly, the GPs are not interested in knowing the tools of TE's trade, namely the herbs in the prescription. And TE only passes on details of herbs if there is any potential interaction with drug medication. The GPs were happy to take him on based on a presentation that focused on cost-effectiveness in treating gastro-intestinal conditions. No herbs were mentioned. Similarly and subsequently, the GPs are not interested in TE's

prescriptions, 'in what goes into the patient', but are happy simply to see that his approach is similar to theirs. He is qualified, competent and responsible and that is enough for them, even if some of them have suggested that he should train to be a medical doctor, just like them. While TE's medical approach is useful in gaining acceptance, the fact that herbs are barely mentioned in his NHS case notes and that he sees them as drug medicines anyway, explaining to patients that 'this is a drug as well', means that the herbs are rather hidden. Additionally, they do not have a physical presence at the GP practice. They are kept at his home. This combination of taking an orthodox medical approach and the hidden nature of the tools of his trade, namely the herbal medicines themselves, makes it difficult for him to define his practice against what the GPs do. Besides prescribing his hidden herbal medicines, what he does is very similar to what a GP does. And this makes his professional identity less secure in that he is not offering something that different from what a doctor offers.

We now turn from TE, who relates to herbal medicine through the lens of orthodox medicine and science, to CP, who relates to a particular herb through her empirical experience of it as a medicine.

CP

Entryways

CP comes from a medical family. Her mother was a private GP.

So she qualified pre antibiotics, she's got fantastic stories about, you know, seeing people cough their lungs into tin buckets in the consumption wards, you know it being the forties. And amazing stories about doing domiciliary work... when people had no running water. And she spent the first year of her medical degree doing botany, I mean obviously not every day, but they used to go to the botanic's once a week.

Her mother worked from home and had a clinic phone that CP used to answer. Now CP also works from home and her own son Sam answers her clinic phone for her. She uses her mother's desk, which had previously belonged to a relative who had been an eminent physician in the early 19th century, and which contains hemispherical pockets for the guineas that he would have received as medical fees. She became interested in the clinical encounter and decided to study acupuncture. After graduating with a degree in acupuncture she sought clinical experience and worked for free in GP's practices for two years, seeing about 16 patients a week.

I, because I wasn't being paid, so I felt I could be very bossy about my terms. And I said, I don't want your heart-sinks, and I don't terribly want complex long standing musculo-skeletal, you can send me acute musculo-skeletal, but what I'm really interested in is gynae, headaches and psychological stuff.

CP had difficulty getting pregnant. During a study trip to China she visited a Chinese Medicine doctor:

But also, straight out of a hospital pharmacy in China, having seen the top gynaecologist in Fujian province, which has a population of 80 million people or something. And I was, my, the doctor I was training with took me to see the most revered old lady, and she took my pulse and looked at my tongue and talked to me through interpreters. And I was given this prescription that felt like the Holy Grail, and I got it straight out of the hospital pharmacy. And I took that, nothing.

She also saw an acupuncturist in the UK who took her to see her own supervisor. They disagreed on her diagnosis, with her acupuncturist seeing her as 'kidney yin deficient' and the supervisor saying she had 'phlegm fire harassing the heart or something'. This disagreement was difficult for CP:

Jacqui's was a very deficient condition, and his was a very excess full condition. And the fact that there was no overlap, and his condition was up here, and her condition was down here, I mean they're, it was a bit well, don't you

guys, you guys cannot know what you're talking about if these two very experienced practitioners can have such a fundamental disagreement, I thought. It was very dismaying.

After hearing about a Western herb for fertility she visited a practitioner of WHM.

She gave me herbs, which included *Vitex*, and I started taking them in September and I took them until December. And then I got fed up with the whole thing, and by this time I'd been trying about five years, and I stopped, and then I got pregnant the next cycle. And I always absolutely put it down, there was a very key physiological change..... but I'd never noticed any difference with the Chinese herbs.

The physiological sign was stretchy cervical mucous:

But it, the stretchy mucus, I hadn't had that for years, I hadn't had it for years. I saw it one morning, Brian was about to go to work, I said, come back! And that was it - that was Sam.

After this CP studied for a degree in herbal medicine.

Chinese Medicine: the triumph of theory

Early on in her career CP began to treat women who were having difficulty becoming pregnant. In one year she had a 100% success rate with her fertility patients, with 12 women under 45 years old getting pregnant. She was then getting two or three new fertility patients a week and thereafter found that she had to start a waiting list. By this time she had completed her herbal medicine degree and was treating some patients with herbs, although these patients don't receive acupuncture as well, as this was a condition of membership of her herbal medicine professional body.

In her acupuncture practice her fertility patients come to see her four times a cycle. This is necessary within the theory of Chinese Medicine:

So in acupuncture what I say to patients is, four times a cycle, you come when you start to bleed, and what we're

thinking of is getting a nice clean bleed, so you get a nice clean surface for the endometrium to grow on.....we do the sort of points you would use if you were inducing labour. And then the next time they come back which is a few days later, we're wanting to nourish the yin. So that's a much more nurturing, containing, supporting treatment, and it's much stiller, and you don't want to move. Unless there's someone with a lot of blood stasis and pain, in which case you might want to move in a sort of residual way. And then the next time we see them which is when they get their stretchy mucus, just before ovulation, you want to move, because you want everything moving in the fallopian tubes, and you want the ovaries to release the eggs smoothly, and you want all the cilia in the tubes to be moving. And you want the sperm to come up, you want things nice and mobile, so it's all about moving. And then the fourth treatment, which is when you are hoping there's a conception, and you want to hold and contain it, is all about nurturing yang, which is the warmth of the second half of the cycle. So in a way, very crudely we sort of do the same thing with each woman.

A similar approach is taken with herbs that are used within Chinese Medicine:

No, I give, I mean I know, so for instance when I was taking Chinese herbs I had I think four different prescriptions (within each menstrual cycle), or at least two different prescriptions.

Always *Vitex*: the triumph of empiricism

While CP uses theory as the foundation for treatment with her acupuncture patients, it is her own personal experience of taking *Vitex* that is most important for how she uses herbs in her herbal practice.

No. And I'm obsessional about it, and I notice that patients come to me, I may say, do you get fertile mucus? 'Oh, I don't know'. And I describe it and they say, 'oh I don't know'. And then they say, they come in some of them, and they come through that door and they go, 'I've just got it, I've seen it!', they're so excited and very often they're pregnant within a cycle or two. So it is really interesting

and, I wasn't just on *Vitex*, I was on *Vitex* separately in the morning and then I was on a mixture which I know Sarah has written down for me, and I should try and, I've gone and lost it I think, anyway I was on *Chaemalerium* and Black Cohosh I think, various other things.

Instead of prescribing multiple herbal formulae during each cycle, as would occur in Chinese Medicine, CP's experience of being treated with *Vitex* as well as a single continuous formula means that this is the approach she takes with her patients. Empiricism trumps theory.

.....so you would take them prior and post your ovulation. But because they didn't work, I don't do it. I mean I'm very fascinated by how individual physicians may be scientifically trained and may know that they've got to look around at those control trials and all that. But actually what affects their thinking is their own clinical experience. And one's own clinical experience is even more salient and valid than one's patients'. So the fact that I had one prescription for three months, and I don't think Sarah saw me once during that time, and then I got pregnant, is enough for me. So I tend to give prescriptions, I tend to wait until I've seen them through at least one menstrual cycle and I see the BBT, and then I prescribe on the basis of what I see on the basal body temperature chart. And everything else. But the prescriptions look very similar, you know, they've got Peony and Dong quai and *Chamaelirium* and very often *Rehmannia* or almost always *Rehmannia*.....Sometimes *Vitex* goes in the main prescription and sometimes the *Vitex* is separate.....They almost always get *Vitex*. Sometimes they just get *Vitex*.

Side by side: Chinese herbs and Western herbs

CP describes the case of a patient who had had several failed IVFs. Subsequently it was found, after a hysteroscopy, that she had uterine adhesions and scarring and was not building up her endometrium, explaining why she wasn't getting pregnant. One of the herbal medicines that CP gave was a liquid tincture formula focused on her endometrial health.

So she started coming to me nearly a year ago, and she was just embarking on this, and I, so what I needed to do was prescribe her a herbal medicine to build her endometrium. And that's all I was interested in, I'm very simple minded when I do herbal prescriptions, I just think about one thing, and I don't tend to think about, I'm not very holistic, I don't tend to think about the whole person..... So she's got, yeah, so this is a good mix, she's got three Chinese herbs and three western herbs. So she's got, so I think that I want to build blood, which is a Chinese thing....

This patient's herbal medicine included three 'blood building' Chinese herbs – Chinese Angelica, Peony, and also *Rehmannia*. This last herb has two common preparations in Chinese Medicine – the raw herb, Sheng Di Huang, and a 'prepared' preparation, Shu Di Huang, the second of which is warmer and more of a blood tonic, so this was included. However, the Chinese Angelica was also selected because it is a 'uterine tonic' and 'oestrogenic', which are both terms from WHM rather than CM. Similarly the *Rehmannia* was selected for its 'adrenal tonic' action. The next three herbs, *Centella*, Dandelion (*Taraxacum officinalis*) and Liquorice, were included in this formula for mainly 'Western' reasons:

Then she's got *Centella*, because of the scarring and adhesions.....that's obviously got to go in, hasn't it? And then she's got *Tarax* because she's going to be having loads of drugs over many cycles. Normally I don't get terribly fussed about the liver, I always think that actually the liver is an organ with a huge amount of capacity and a few IVF drugs, most of which actually look like, well they don't look like, they are, human. I mean you know, FSH comes from old ladies wee, it's not as if it's some toxic unknown, do you know what I mean?.....It's follicular stimulating hormone, and in menopause we have buckets of the stuff. So I don't get very excited about needing to support liver in IVF but she was going to have, it was such a palaver and over such a long period, I thought, and also *Tarax* regulates oestrogen, I have read. It ups the expression of oestrogens and obviously that's really important for her. And it's eliminative, so she's quite a bit of *Tarax* in there. And then she's got Liquorice, because from a Chinese point of view it takes things down into the

lower jiao and it's anti-inflammatory. I always think all herbs are anti-inflammatory but, for adrenal support, and also she was going to be on aspirin quite a lot of the time. But it's interesting going back over prescriptions, isn't it, again I'm very single minded about not changing them. And at her first IVF cycle, her endometrium had got up to over 6ml, which it had never done before.

Thus, While CP uses Chinese terms such as 'blood builder' and 'blood tonic' for the Chinese herbs *Angelica*, *Rehmannia* and Peony, she also applies the Western terms of 'uterine tonic' and 'oestrogenic' to *Angelica*. Furthermore, drawing on WHM's knowledge of *Centella*, *Tarax* and Liquorice, she uses mainly 'Western' reasons for including them e.g. to treat 'adhesions', to 'support' the liver and for anti-inflammatory activity, although Liquorice is also included to 'take things down to the lower jiao'. Thus Chinese and Western herbs are included in the same formulae, with Chinese herbs having Chinese and Western justifications, and Western herbs having both Western and Chinese justifications. It all gets mixed up in the bottle.

Reflections on CP

CP came from an orthodox medical family background but ended up practicing acupuncture and WHM. CP took a particular herb with a particular goal in mind and now most of her patients are prescribed the same herb for the same reason. Although CP did not have any enchanting, and therefore hidden, human-nonhuman entryways into WHM that involved crossings between herself and living plants, there was an enchantment of another sort. This involved her own experience of taking a herbal medicine, *Vitex agnus-castus*. This experience was 'sensual' in that it involved the physical manifestation in her body of cervical mucous changes, which become stretchy and resembled raw egg white. It was also 'affective' in that, beyond her own joy in becoming pregnant with Sam, it is now something that CP and her patients look for. And when it is found, it is experienced with great delight. These cervical mucous changes act as a clear indication that a patient's fertility is

improving, providing a sign that may be seen as a sustaining 'energy' in her practice, helping to encourage perseverance in what can be a long and stressful process from reduced fertility to the birth of a child. Thus there is a sensual-affective energy, or enchantment, in her practice that started with her taking a liquid medicine of *Vitex agnus-castus*. It starts with a material medicine made from a plant, rather than with the plant itself.

CP's personal experience has meant that theoretical concerns are less foregrounded in her herbal medicine treatment of patients than it is in her acupuncture treatment of patients. There is less theory and more empiricism than might otherwise have been the case. This empiricism can be seen in CP's approach to formulating herbal medicines, in that Western and Chinese herbs, and Western and Chinese knowledge of Western and Chinese herbs, are easily placed together in a focused prescription. Herbs go well together if they meet the needs of what is being addressed in the patient. This may be contrasted to the use of herbs within Chinese Medicine, where the overall balance of the prescription is likely to be more important than in WHM.

While CP, through the experience of taking *Vitex agnus-castus* as a medicine, embraced the enchantment of empiricism rather than theory in her herbal medicine practice, we now look at a practitioner of WHM who turned away from the empiricism of WHM towards the enchantment of theory that she found in CM.

EP

Entryways:

EP came from a family background of conventional medicine:

I grew up in a terribly orthodox family, my father's a surgeon and then he became an anaesthetist later on, and my mother was a nurse, and my stepmother a pharmacist and I went into nursing....

EP's experience of seeing herbal medicine help a patient successfully withdraw from steroids was important for her becoming a herbalist:

Well, I suppose I became a herbalist when my children were quite small and I met somebody who had a birth trauma which ended up being an anal fissure and she took herself to, she was taking steroid suppositories.....But the more she used them, the more she had to use them and she took herself to a herbalist who sorted the whole thing out and got her off the steroids, and I was mind blown because I started out in nursing and I thought if you had to have steroids, it was serious and there wasn't an alternative, so I thought, hang on a minute, this is a bit, it really took me by surprise.

After this experience, EP eventually studied herbal medicine at the School of Herbal Medicine.

Learning through challenging patients

One of EP's first patients as a qualified herbalist challenged her to come up with a solution where orthodox medicine couldn't.

One of my first.....the child with the foot, the thirteen, fourteen year old with osteochondrosis, where the metacarpal couldn't keep up with the growth spurt and it just started to disintegrate. And, yes, that was fantastic, she'd been, for, she'd taken ages to get to see an orthopaedic guy and eventually she did and he basically said, we'll give you anti-inflammatories, and then we'll operate and we'll remove the bone and you'll be crippled for life. And so I did a foot soak with Comfrey, Arnica and Wintergreen, and gave her internal anti-inflammatories, with quite a lot of Comfrey as well, and within two weeks, she favoured that foot, it was amazing. It really was amazing, which is why now, the 'duck poo', as it's called, the Comfrey, Arnica and Wintergreen ointment, which looks like duck poo, is so, is one of my most popular things, I've just made it, ever since then, into an ointment, to make it more user friendly....

EP likes to treat local problems locally:

And that is a very Western approach, because Wintergreen is 98% aspirin, and then Comfrey and Arnica, it just makes sense. And you just put it where it's needed, so it's really good.

Green medicine – the triumph of empiricism

After qualifying in herbal medicine she started to provide first aid and acute herbal medicine at Green festivals. EP remembers being challenged by an acute case to come up with an immediate solution:

He was about 9, he had had a piece of hay in his eye, and his eye swelled up like a ping pong ball, it was right out of the socket, he could not blink. It was very frightening. I said 'hospital now!' And the father said 'I don't believe in hospitals, this happened last year, it wasn't so bad, you can do something. We don't need hospitals or orthodox medicine'. And it's horribly surprising how often you hear that. And I said, 'No, no, please he can't blink, he'll get an ulcer on his cornea, it will cause blindness. Let me take him, somebody has to take him', they refused. So I said, we'll see what we can do, if it's not substantially better in half an hour I want you to take him to hospital. So I cut a slice of cucumber and stuck that on his eye immediately, made him a pot of eyebright tea and gave him a STAT dose- take now, he was 9 or 10, I was so frightened by it, it was 10ml of *Ephedra* and 10ml of FE of *Urtica*. And he quaffed that back and by the time the kettle was boiled and the tea was made the eye had gone straight back into the socket. It was phenomenal, it works well, but you do get put on the spot far too often with people who don't want to go anywhere near orthodox medicine.

EP developed formulae for particular conditions:

..the formulas definitely came as a result of my wanting people to use things that I knew were going to be effective, and I'm very happy for people to take the formulas away with them and just, if I've learned something I think it's my duty to pass on the information, rather than hold it to myself, I think that's just an appalling thing to do, really it's, why would you do that, you want herbal medicine to be known for its excellence, not known for people not quite getting it right.....

On a visit to a festival where EP was organizing and providing first aid and acute herbal medicine, there was a team of 5 supervisors, 7 experienced herbalists, 7 newly qualified herbalists and 5 students. I was one of these volunteers. In the dispensing caravan, tinctures of single herbs were lined up alphabetically by Latin binomial name on shelves along a wall. Tinctures of herbal formulae were on shelves along another wall. They included 'constipation mix', 'allergy mix', 'UTI', 'stop panic mix', 'asthma mix', 'cough syrup', 'GE cough syrup', 'acute infection mix', 'hayfever mix', 'allergy mix' and hangover mix'.

The 'acute infection mix' contained the herbs *Echinacea*, *Baptisia* and *Phytolacca* (Pokeweed). EP describes their inclusion:

(These herbs) are specifically for respiratory, upper respiratory or lower respiratory chest infection and I just found them to be so effective year after year that I just knew that that, if you've got an acute thing, I mean we were told Pokeweed is when you really need to 'poke it out' and it's really stubborn, why wait until it's really stubborn before you use it, if you use it in an acute situation, when it's brand new, you won't end up with a chronic problem, so I just picked those herbs because I'd seen them work so effectively so many times. And then you can tailor the rest of the prescription to sinusitis or otitis or whatever it is...

The empirical use of herbs for particular conditions is further demonstrated by the following case of a patient at a festival: I was in the caravan dispensing a medicine when a young man in his 20s knocked on the door asking if we had the prescriptions from last year. I replied that they were not here. He said that he had put his back out last year and had been given some herbal medicine that had really helped. 'I really just want the same thing' he said 'I have done it again'. I took him into the damp first aid tent, as it had been raining heavily, where I introduced him to the supervisor who said that she had also been there last year. They recognized each other. She said that she could remember what she used last year 'I use a fairly standard approach for acute back problems. Did it taste of

liquorice?’ ‘Yes, and it cost about £20, you gave me enough for a few weeks’. She replied ‘I think it was devil’s claw, *vib op* and liquorice’.

Chinese Medicine – the triumph of theory

While the above examples show a concern with using particular herbs, or particular herbal formulae, for particular medical conditions, EP found that she was not having the success she wanted with dermatology patients.

I suppose about two or three years in, after qualifying as a Western herbalist, I realized that I didn’t have a clue what I was doing with dermatology and sometimes I got it right and things healed beautifully, and sometimes I got it wrong, and nothing worked, and I didn’t know why I’d got it right and I didn’t know why I’d got it wrong, and I just knew I didn’t know what I was doing. And so I decided to learn Chinese herbal medicine, because they have a reputation for being good at dermatology

Initially she was resistant to the learning the theory of Chinese Medicine, but then became enamored by its understanding of patterns:

...when I first started studying it, I just thought, this is a load of bunkum, absolute rubbish, how can it be that simple that wind brings diseases, and you get hot or cold or, I really thought I’d lost the plot when I first started studying it, but then it takes, you have to really understand Chinese medicine at some depth to realise how complex and how fantastically simple and complex it all is. It is, it’s really amazing. So, because I’d learned the herbs, I started using them, and because they diagnose, they put all sorts of symptoms together that Western medical people wouldn’t do, like things like floaters in the eyes and restless legs, or leg cramp, foot cramp, that kind of stuff, with low energy, and they’d say it’s a blood deficiency, and you kind of think, Western people wouldn’t connect any of those things together, let alone have a diagnosis, so if you know that, and people say, oh I get so much leg cramp and you say, and do you get restless legs, and do you get floaters in the eyes, and do you feel really rather tired in, just energy crashes. And they’ll say, ‘well how did you know that?’ And

it's just, it's, so lots of people who come with symptoms you can hone them in to a pattern, a diagnostic pattern that Western medicine just wouldn't recognise, so it just makes another tool kit really for getting people well.

After qualifying in Chinese Herbal Medicine she later qualified in acupuncture and now combines WHM, Chinese Herbal Medicine and acupuncture in her practice. She finds that Chinese Medicine helps her to talk to patients about their conditions in ways that make sense to them:

Chinese medicine's very poetical and very, it's very based on nature, so they'll talk about qi stagnation as if you've got a river that's got debris in it, that'll be, causes the qi to stagnate, or the river doesn't have enough qi in, then it'll stagnate because it's just not flowing properly, or if it's too hot then it'll dry up and it'll stagnate, or too cold and it'll congeal and turn into ice cubes, so it'll stagnate or, so they have all these different ways of talking about it and you can tell somebody if you've broken your arm, of course that's local stagnation, it's like a branch went across the river. So they like hearing their diagnosis in those sort of terms and it just makes it much easier to explain.....yes I much prefer to talk to patients in terms of Chinese medicine, than I do in terms of the Western medicine, but quite often I'll say, well Western medicine will say this, that and the other thing.....

She finds that Chinese Medicine's approach to diagnosis leads easily to a treatment approach:

Take a lipoma or something like that, that would be considered as 'phlegm' in Chinese medicine, and phlegm comes from dampness that lingers around too long and you get dampness from certain dietary things, so you can go into, these are the damp forming foods, and if you cut them out, it will go a long way to sorting out your damp, and then if you put these foods in, that'll also help. So, they like to hear things, self-help things, eat a lot of seaweed, and put, pungent things like horseradish (into your diet)....you know that if you eat horse radish, you're going to start streaming aren't you, so it cuts through phlegm, it makes sense and people just get it.

And aromatic things are moving, they make the phlegm move or the mucus move, so they encourage dispersing and movement, and they'll break up stagnation of that sort, so it makes sense.

She compares Chinese Medicine with that of a Western approach in WHM:

I mean, what would you do about it, a lipoma in Western terms, you'd probably say, well you're stuck with it, have it cut out. Yeah. So the Chinese would have ways of trying to explain to you how that happened and therefore hopefully you won't end up with ten of them, which people do, obviously get more and more, if they don't alter their diet and their lifestyle

The safety of WHM, the attraction of Chinese Medicine

While Chinese Medicine has added a more poetic, theoretical approach to EP's practice that allows treatments to logically and consistently follow-on from diagnosis, EP still values WHM and finds that Chinese Medicine and WHM go well together:

.....because I've been doing it so long, I integrate them very comfortably, and for a while, if people came with, let's say indigestion, I know that the Western herbs work so well for that, that I wouldn't really bother with Chinese herbs for indigestion, because why would I, when I know what works so well in Western herbs, but then, if somebody doesn't get better with the Western herbs, then I switch to Chinese, that's quite often the way I'll do it. But if someone presents with something that's very obviously going to fit into a Chinese box, then I'll just go hone in to that. But I, most of my prescriptions are a mixture of Chinese and Western herbs, so I'll pick the best from each discipline and put them together.

EP gives the example of treating different Chinese Medicine presentations of infections with both Chinese and Western herbs:

if you think of Chinese Medicine and the wind-cold and the wind-heat, these kind of prescriptions are roughly based on that.....wind-cold means that you feel cold and achy even

though you have a fever and so I would make sure that 50% of the prescription is that acute infection mix and then Peony, Cinnamon, *Eupatorium perfoliatum* - fantastic herb for aching bones really really useful..... And when you're feeling hot and have a sore throat Chinese would call that wind-heat. So I would use the acute infection mix and then *Lonicera* - Honeysuckle, or *Forsythia*, and obviously *Achillea* or *Sambucus* are fantastic, we would use those. *Mentha* is used in both Chinese and western herbal medicine.

The herbs from the different traditions sit easily together in her prescriptions. However, when it comes to case-history taking she doesn't mix up the different elements from the two approaches. She prefers to follow a WHM case history, only introducing the Chinese Medicine questions at the end. She sees safety as coming from her Western training:

The Chinese case history taking.....I mean, honestly it's so superficial and just, it's just not good enough, I'm sorry, it's really not good enough, I mean they ask, they'll ask you to tell, tell me what's the problem, to go through your stuff, and then they'll say, do you sweat normally, do you sleep normally, do you eat, how's your appetite, how are your bowels,..... sweating, and thirst is another one, they want to know thirst and whether your body temperature, do you feel hotter than anyone else, or are you feeling cold, chilly.....

.....very little, very, very little, I couldn't do it that superficially.....but I suppose I'm steeped in the Western stuff enough to need to feel safe in my practice with that. I don't think I'd feel very safe in my practice without it, I really don't.

Reflection on EP

EP's entryway of seeing herbal medicine working more effectively than orthodox medicine, in the case of a patient taking steroids for an anal fissure, is also visible in one of her first cases as a qualified herbalist, when she successfully treated osteochondrosis of the foot, thus preventing the need for the patient to have surgery. The influence of an orthodox medical background that led to her initially adopting a nursing

career can be seen in her interest in first aid and acute herbal medicine, something that is not normally covered in herbal medicine training courses.

The empirical nature of the formulae that she developed in her acute WHM practice, with formulae treating particular medical conditions, reflects the empirical side of WHM more generally. Experience has led to the development of knowledge of particular herbs used for particular conditions, even if these have been more and more influenced by rational scientific thought as well as diverse approaches that practitioners have brought into their practices.

While taking an empirical approach had led to notable successes, EP's engagement with WHM had been without what a later herbalist will call a 'Theory of Cure' that could help her to understand the root causes of illnesses, as well as their solutions. Reflecting on her lack of consistent success with skin conditions, EP even says that '.....and I didn't know why I'd got it right and I didn't know why I'd got it wrong..' It was this lack of clarity that led EP to study Chinese Medicine. While the success of much of her empirical approach to patients may have provided the energy necessary to maintain her practice, it is her engagement with Chinese Medicine that is arguably more enchanting for her. Although it took EP a while to be drawn into Chinese Medicine, she eventually found the simultaneous simplicity and complexity of Chinese Medicine to be 'amazing', with its references to nature and patterns making sense to her and her patients. While synthesizing the traditional with the modern in specific practices is the hallmark of Chinese Medicine in contemporary China (Scheid, 2002), EP synthesizes Chinese Medicine and WHM in her practice, producing further plurality. In particular EP found that Chinese Medicine theory meant that diagnosis easily led to treatment. Rather than living herbs being enchanting for EP, it is possible to see Chinese Medicine's Theory of Cure, with its direct link between diagnosis and treatment, its respect of patterns and language that engages with metaphors drawn from nature, as being enchanting. The sensual nature of Chinese Medicine can be seen in any discussion of its theory or practice. For example, EP talks of 'wind-cold' and 'wind-heat' and of

'phlegm'. These are phrases that one feels as much as one thinks about. A look at any discussion on the yin and yang of Chinese Medicine also reveals the primacy of the senses: thus yin is seen as having qualities, for example, of being docile, dark, earthy, cloudy, soft, moist, slow and cold, while yang is seen as dominant, bright, sunny, hard, dry, fast and hot. It is not possible to study or practice Chinese Medicine without engaging the senses. Thus its theory necessarily engages with empirical experience.

It is this crossing of sensual empiricism with theory that may be seen as the logical end of EP's narrative trajectory that started with the empiricism of developing her own WHM formulae, followed by the identification of her own lack of theoretical knowledge and ended with EP eventually studying and practicing Chinese Medicine alongside WHM.

JK

Entryways:

JK's introduction to herbs came from her family:

Well, I suppose it all started with my mother and grandmother, both Italian and always using simple herbs like elder and chamomile, marshmallow, those are the herbs that my grandmother used to know and pick, although she didn't know anything about herbal medicine, but it's still used in Italy, in a very simple way. So we always had elderflower tea made in hot milk when we were, when we had colds and had to sweat it out and so I'd always had that in the background..

An exhibition on North American Indians was also important:

.....I suppose when I was about 18, I went to an exhibition on North American Indians and was fascinated by the medicinal side of it, and actually bought a Herbal, from the Chipaya Indian tribe, who treated again, very simply, with herbs. I was just fascinated to know that actually there was more to it than that...

Hein Zeylestra and training: the rise of science and decline of Physiomedicalism

JK went for an interview to study herbal medicine with the NIMH:

....then I started the course, went for an interview at Leicester with Fred Fletcher-Hyde, and at the time we really, we didn't really have any smart clothes or, we lived in utter poverty, me and my friend, so we had to buy tights and dress up on the way, and make sure our nails were clean and everything, because we heard that was what he was interested in, personal appearance, and just talking to you. And he was quite taken by both of us and allowed us on the course, so that was the interview process...

JK started her studies in 1979 and finished in 1985, having two children during the course. During her studies the course became independent from the NIMH, with Hein Zeylstra becoming the principle of the School of Herbal Medicine. Hein brought in a more science-based approach:

And yeah we did a lot of pharmacognosy actually, a lot of examination skills later on as well, so and Hein's wonderful materia medica lectures, I mean we just, that was the, probably the best thing actually and everyone hung onto his every word, because he's such a good speaker, and such a good, he convinced, certainly convinced you that what scientific knowledge there was, he could bring it over and actually convince us that we needed scientific basis where we could. So he discounted quite a few herbs actually that were traditionally used because there's no science behind them so, I remember he was, he wasn't really into *Hypericum*, 'oh *Hypericum* doesn't work', because at the time there was no, there was nothing on it really.....

Hein disapproved of 'polypharmacy', where many herbs were used in each prescription:

He was trying two things, to get people out of polypharmacy, using simples, and knowing where they were with the medicines, what action they would have. He said, how can you tell, if there's 30 herbs in a bottle, you can't tell what's

going on. And to some extent it's true, you can't, it's very difficult and so he was very much into using simples.....

Hein anticipated that understanding herbs as pharmacological agents would be required:

...he'd obviously use three or four herbs in a mix, but he'd say, this is your nervine, this is your, and then see if that nervine works. So you can understand the principle.....But he was just trying to re-educate people into thinking, look, try and look what's going on scientifically, rather than have a mishmash of, you know, you don't really know, because I think he foresaw that we were going to have to prove to Europe that our herbs worked scientifically.....in Europe, they, the pharmacists were, the pharmaceutical industry were the ones who governed herbs in Europe, and they were already looking at a herb, on its own, and what the action would be, so the first herbal pharmacopoeia came out in the late '70s, early '80s.

Before the School of Herbal Medicine established its own teaching clinic JK trained with a Physiomedical practitioner:

.....I used to go to her clinic..... every week and she was fantastic actually, she was really, really good.....She was incredibly interesting because she operated on a polypharmacy basis and although I didn't, I never did the dispensing, she had a dispenser, we were just seeing patients, but looking at some of her stock bottles, they were mixtures of maybe three or four herbs together, for ease of dispensing, because she always used those together, so I know somebody, I remember she used to use *Vitex* with, and this is *Vitex* tincture, with *Chamaelirium* and, *Vitex* and *Chamaelirium* together, yeah, that's it, those two.....Other ones she did were, always, always used *Echinacea*, *Baptisia*, *Phytolacca*, so strong immune mix really, that she'd then add other things to, and actually they do go well together, really, yeah. There were lots of others, she'd never use just one astringent, say you were treating the stomach, she'd use tiny amounts of lots of different ones, so my reasoning, my reckoning on the reasoning there was that you'd be using

similar groups of herbs with slightly different actions, but if you wanted astringency, you'd get maybe 25% astringency from different ways and that sort of thing, so nervines would be mixed as well and I still tend to think in that way, although I don't use 30 herbs in my bottle, but I do tend to amalgamate certain actions that I want to bring out, rather than using a simple nervine, I'd use a group of them, so maybe two or three, yes.

After completing her studies JK worked as a clinical supervisor for Hein. She continued to use herbs that Hein considered didn't have sufficient scientific evidence behind them:

It was, it was really, yes. If, I suppose if it hadn't been for Hein, well he was, probably wasn't the only one, but he was so fervently against it, he used to say to me, oh, when I was teaching for him, he used to say, and I'd come up with this herb, and he'd say, why are you using that, and I'd say, well because it works, and he'd say, oh I forget, you were taught by ST, you poor thing, so, jokingly say that but...

The continuing influence of Physiomedicalism on JK:

Despite the waxing of science and the waning of Physiomedicalism in her training, 30 years on, JK still finds Physiomedicalism useful to her:

We'd been taught on a fairly pharmacological basis really, and not an awful, not a great deal of philosophy behind it, except for the Physiomedical philosophy, which was kind of going out of fashion at the time, so they were half heartedly teaching us, because it was the only thing that we had, but it was, I found it quite interesting actually and still consider it in my choice of herbs and when I'm looking at a person, not just purely from a pathological, clinical medicine point of view, I'll look laterally at them and try and figure out what they, what the balance of their tissue states are. So I look very much along the line of tissue states, so when I'm prescribing I think of herbs which are going to alter those tissue states, so alteratives, nervines, I mean everything does it to a certain extent, but triggering that change that's going to then help the body to regenerate and recuperate...So the Physiomedical thing was quite an influence, but we always took it with a pinch of salt, because

some things have been disproved, that funny idea of the circulation and that, but I think some of the things still stand....

JK gives some examples of how the Physiomedical approach to tissue states influences her practice today:

So it's looking at whether you need to improve the circulation to an area to actually help relieve inflammation or. If you take basic inflammation, if it's very acute then you need to just calm it down a little bit, so you'd be using counterirritants, all of the counterirritants, you'd be using something cooling and there's enough circulation there to help, so you wouldn't particularly give anything that would dry the circulation out. And if it becomes sub acute, or chronic, then obviously you need to think about getting that, almost challenge the body to react again, so that it can clear it. So that's the basis of really, of whether you're going to stimulate or relax, and I suppose you can use that term, in terms of nervines, or you can use it in terms of movement in the body, so that's basically it. And each type of tissue, whether it's a mucus membrane or the outer part of the skin, or a solid organ, has its own method of working in a sense, so mucus membranes, they like to produce mucus, what is it for? It's for protection, it's for lots of things, so you're looking at that, if that is breached in any way, then you're going to get the wrong kind of, if you like, toxins getting through, affecting tissues which aren't supposed to be affected, so whether it's the stomach, you need to think along the lines of, is the, are the tissue states conducive to getting things better?

Proper diagnosis

Some herbalists feel that WHM is lacking a discipline-specific philosophy behind its approach to diagnosis. However, JK prefers the 'proper diagnosis' of orthodox medicine:

The Chinese is Chinese, it's rigid it's this and that's it. With ours, we come from different strands, so our philosophy has kind of been a little bit watered down and a little bit elusive, and so elusive to some that they hanker for perhaps the Chinese way or the Ayurvedic way, and so they'll amalgamate that to help them perhaps diagnose, because

they haven't really got involved in proper diagnosis. I like the proper diagnosis, I just love that, the actual physiological diagnosis and seeing things laterally.....

JK uses an orthodox medical approach to diagnosis, obtained by taking the case history and by physical examination:

So when I see a patient now, I think case histories is by far the most important thing, I do like to examine the patient, and where necessary obviously send them for tests or, but I find the whole idea of diagnosis just such, such a pleasure. It's like being Columbo or somebody, it's just great. And I don't know if you play bridge or cards but you get dealt a pack of cards, a hand and when you pick it up you've no idea what's going to be in it but it's, but you can make something of it, and you can, and it's, and then playing out that hand is very exciting because you're making the most of what you've been given. So a patient comes and they've been handed, basically, a hand of cards, and it's, in their complex lives, things that, there are things that maybe they have to live with, maybe they've been dealt a lucky hand and just, so it's helping them really play it out to their best advantage. And obviously if someone comes with a particular condition or pathology, then you have to decide whether or not you can actually reverse that, or quite, and actually whether they're able to reverse it themselves, because I find that they do tend to get themselves better, with a little bit of our help.

While she sees her approach as 'orthodox' she also looks 'laterally', beyond orthodox diagnosis, to identify what may be contributing to a patient's condition:

.....you may come to the conclusion that they've got hardening of the arteries or something, arteriosclerosis, but you're also looking at the way they respond to stress, and the way they process their food, and so, yeah, it is, it's not just then giving them anti-lipids or whatever, it's actually looking at the whole digestive process, and stress levels and the stress brings up cholesterol.....

Three patients: 'proper diagnosis' and Physiomedicalism

JK describes a patient with digestive symptoms that she identified as being of nervous origin, mediated by the autonomic nervous system:

....she had a whole series of setbacks during childhood, psychologically, had actually come out of it quite well, but in some ways somatized some of the psychological problems.....digestive problems, so getting very, very bogged down in taking supplements, being told by this and that person that she had parasites, that she had candida, that, and that she needed, so this supplement and that supplement. And then in talking to her, I'd, I realized that actually, if she just let, if you could break in somewhere, that if she felt all right with herself, she was quite depressed, if she felt better in herself, then actually her physical problems would improve as well, without her getting too obsessive about the little bits and pieces, because the body does that, it's, and so I explained to her how it was linked with the autonomic nervous system, she understood everything I was telling her. I find it's partly an education, that you educate your patient, to understand what they're going through really. And she actually, she agreed that tackling predominately the nervous system, and a few simple measures with the diet and digestion, that that was the way forward. She gave me a big hug when she left and I think you quite often get that, you get just such a release of the patients, actually just being listened to and has had actually a therapeutic boost, just by the consultation, I can't stress the importance enough really. And also making sure that you've got enough details, I'm quite thorough, but only what they want to tell me. I don't interrogate them.

Before he arrives, JK describes another patient to me. He is retired with a twenty years history of sinusitis, frequent upper respiratory tract infections, and monthly chest infections. He takes antibiotics regularly. He also has hay fever, nasal polyps, a history of ear discharge, and is prescribed both blue and purple inhalers. He is diabetic – he takes the drug metformin. He had prostate cancer in 2009, which successfully treated by radiotherapy and his PSA tests are now normal.

During the consultation he asked about Saw Palmetto for prostate health but JK suggests that for now, because his PSA levels are fine, it would be 'better to take turmeric, its very good for the prostate, anti-inflammatory, anti-growth'. They talk about the herbal medicine he had been taking. She says that 'it takes a little while to tone the mucous membranes', and that the herbs included are 'to help with the airways, deal with inflammation, and breathe more easily. Making phlegm more liquid so it can come up more easily.' JK then tests his lungs with a peak flow meter, testing it three times. She listens to his chest with a stethoscope, asking him to breathe in and out with his mouth open. She then uses an otoscope to look in his ear, saying that 'that must be a healed perforation'. Next she gets a tuning fork to test his hearing. She makes the tuning fork vibrate by squeezing and then releasing its two ends simultaneously. She first tests his good side and then his bad side: she positions its base behind his ear on the mastoid process, asks him when he can hear it stop and then holds it in front of his ear and asks if he can hear it now. She then makes another tuning fork vibrate and places the base firmly against the top of his head and asks him if it sounds the same on both sides.

JK's prescription for him is made up of 11 herbs: *Grindelia camporum*, *Myrica cerifera*, the fruit and flowers of *Sambucus nigra*, *Echinacea angustifolia*, *Baptisia tinctoria*, *Hydrastis canadensis*, *Glechoma hederacea*, *Plantago sp*, *Ephedra sinica*, *Glycyrrhiza glabra* and *Inula helenium*. She describes the prescription as including 'some doubling up of actions but slightly different effects. *Glechoma* and *Plantago* are similar in action – tonics to the mucous membranes and for catarrh.....' The other herbs are included for their effect on the immune system, mucous membranes, for pain, for inflammation, for cough and for loosening a cough.

Turning to another patient, who is here for the first time, JK asks him how she can help. He replies: 'something for depression really. Look at it holistically. Previously had felt melancholic for 18 months. But I have accepted within myself that it is more than melancholy.' He is taking antidepressants but is reducing the dosage. He had lost a business that

employed twelve people. He then retrained as a paramedic, during which he was assaulted several times, since when he has had regular nightmares. He is now working as a builder. He has seen a counselor. JK says 'you are in need of some sort of tonic?' He replies that 'yes, if there is a gentler, more rounded way of treating this, that is why I am here'. JK replies that 'stress can affect the adrenal glands....we have uplifting herbs – nervous restoratives – help you with stress and concentration and energy..'

She later suggests that as well as depression he has 'PTSD really'. He says that 'talking to you here I can put a front on, but inside there is not enough enthusiasm'.

JK: it sounds as if you have been quite hurt and you need to recover from that'.

She measure his height and weight, then takes his pulse and blood pressure, which is a 'bit high' before asking 'would you like a bottle of medicine?'

He says yes and then she tells him about the herbs she will give him: *Schisandra* 'works on adrenals and concentration', 'some Vervain and Wood betony, a nervous restorative, traditional for fears and nightmares and pain but basically a nervous restorative, and some Limeflowers, which have a calming effect on the heart and brings the blood pressure down a little bit, and also some Siberian ginseng to help with stamina. *Shisandra* is also an immune tonic, Vervain also works through the digestive tract for detoxification. They have more than one action.'

He replies, 'Like most things'.

These three patients, the first one talked about, and the second two observed, suggest that orthodox medical knowledge and the influence of Physiomedicalism sit well together in JK's practice. While a concern with the mediating power of the autonomic nervous system in human physiology is now basic medical knowledge, such a focus was central to Physiomedicalism, which arose at the time when this system was being seriously investigated. Although both orthodox medicine and JK take this system seriously, JK's treatment of the digestive system by giving a range of medicinal agents that affect the nervous system is something

that is generally not available to orthodox medicine, beyond the use of antidepressants. JK's comments on this patient also show the importance of the 'therapeutic boost' of the consultation, a concern that has Physiomedical as well as orthodox origins.

The second patient shows how orthodox diagnostic techniques of auscultation with a stethoscope, visualization of the middle ear with an otoscope, and cranial nerve testing using tuning forks sits neatly next to a Physiomedical approach seen by the use of polypharmacy including some 'doubling up' of herbal actions.

The second and third patients show how the medicines are chosen for particular tissues, organs or systems, for example, mucous membranes, the immune system, adrenals, and digestive tract. Although JK does mention bringing blood pressure down and treating inflammation, there is generally more attention paid to tissues, organs and systems than there is directly to pathologies. Thus the states of tissues are addressed.

JK's Wood

JK spent a lot of time in woodland with her family and dog, saying 'I just always wanted to pretend I lived there'. She collects some herbs from woodland:

....rosehips and hawthorn, yeah, mushrooms, I met John there once and he took me mushrooming, just by chance, he was actually picking rosehips, because I didn't know a thing about mushrooms so, yeah, so we used to go and get oyster mushrooms and, so yeah, it was more for the therapeutic nature of the woods, rather than for the herbs that you get out of it, I just really felt it was just beneficial to health, woodlands.....

She explains its attraction:

.....walking through trees, just the variations in it as well, where you might get an open bit that is rather meadow-like.....very grassy and thick, thick, trees, where you can get lost in them and bluebells and all the sort of different layers that you get in woodland, it's just, it's endless, endless really charm and interest. And little brook that goes through it,

and all the different plants that you get growing in different areas. So yeah, so I thought, I might get a wood,

Eventually she did buy a wood, where she spends time with her family and friends, often camping overnight:

.....we're actually going to go birch-sapping there soon, it'll have to be soon because otherwise it'll be too late, I'm just waiting for some weather really to be able to go down there.....So I've got two plots, and put a little, or quite a big shed actually, probably about, nearly the size of this room, but it looks really small there, just storage and shelter. And, yeah, I just go there and do all sorts of things, it's ancient woodland and a lot of it.....is chestnut coppice and oak and hazel, and then some areas are plantation, so I've got some plantation as well, Scots Pine, so it's just really lovely.....I did some brashing, that's why I took the photos, so I had a reference magazine and showed how I'd done the deer fencing with the brash.....To protect it from, the coppice, so they're a bit naughty, the deer, and when they get hungry they'll eat anything, even chestnut.....we did do a, with Flo and another herbalist, we did a plant survey and I aim to do that every year.....

However, although she loves her wood, for JK it is not easier to be a herbalist with a wood than without a wood:

No, I'd be able to, no, I'd be able to be a herbalist, you don't need a wood to be a herbalist, and in a sense I didn't buy it because I'm a herbalist, I bought it because I love woodlands and I like to play in woods, so it's more, that's why I'm finding it hard, I should be connecting it more, and I could, but it's pure diversion, yeah.

She also loves making things from wood:

And wood, I just love wood, working with wood, so I'm learning all these woodland skills, so I'm going, on Sunday actually, to a bodger's meeting.... bodgers are chair makers and they generally turn, so they have, traditionally they have these hand turning lathes and I've made myself a shave

horse, which is, it's a bit like a vice, which you sit on, so you have the thing that traps the wood in there, and you sit astride it and you operate it with pedals, so it's on a pivot and then you use a shave, a spoke shave or a drawer knife and you can carve wood, and it's so easy and so beautiful and you can carve, you can sort of make, well I made a swill, you know one of those baskets made out of chestnut and, shown how to do that, and it's such fun just doing, I just love making things really.

She also loves to make herbal medicines:

.....if I had the time I'd make tinctures as well but I love making the creams, making tablets, and that kind of thing, I think it's the hands on jobs, and all herbalists love to do it.....so I just sit there, listening to the radio, making slippery elm tablets, when I have, and just relaxing. And the patients love them, because they're just pure slippery elm and they're, they suck them and they melt in their mouth, but that, that's quite laborious but I don't mind taking time over things like that. I make my own creams, apart from *calendula* cream, which I can't, I just can't get on with the resins in calendula...

JK discusses her favourite herb, which is a tree. Like her herbal prescriptions, that combine more herbs than other herbalists might use, she selects a medicinal plant that which offers up many parts as medicine:

I think I'd have the Elder tree, yeah. Because it's, you can use any part of it, I, it's useful for a whole range of different things, from constipation to arthritis, to immune function, to catarrh, to, so that one is quite useful.....

Reflection on JK

The knowing and picking of herbs and their use as medicine by JK's family members was an important step on her way to becoming a herbalist. Now JK spends time in woodland with her own family. The entryway of visiting an exhibition on North American Indians has continuing relevance for JK, particularly as she has adopted a clinical approach that includes an appreciation of Physiomedicalism, which was

conceived in North America and, as previously described, grew out of Thomsonianism, which borrowed from Native American materia medica and knowledge. In fact, the Armorial Ensign of the NIMH includes a Native American figure holding herbs used in ritual purification, with the NIMH in the UK being a professional body of Physiomedical practitioners up until the 1980s.

While Physiomedicalism is an influence on JK, she has shed much of its theoretical considerations, for example, of Sthenic and Asthenic constitutions, and of pulse and tongue diagnosis, but has kept a concern for tissue states, with her prescriptions mostly addressing organs and tissues rather than diseases. There is less theory in her practice than past Physiomedicalists might have drawn on. This may be due to the influence of her training, particularly in the primacy accorded to science by Hein Zeylstra and other teachers, and by the pleasure that she gets from the 'proper diagnosis' of the case history and physical examination that is drawn directly from orthodox medicine.

So the material body, with its organs and tissues, is the object of treatment. The other materiality that she is involved with, besides the materiality of her patients' bodies, is that of her wood. She says that she doesn't need a wood to be a herbalist. She bought it for the pure pleasure of playing in woods. This suggests that spending time in nature may be a powerful experience for JK, maybe even enchanting, but that it is not necessary for her to be the herbalist that she is. The wood does not obviously cross over into practice, even if it does cross over into her. So maybe practice and living plants run side by side for JK, although she does say that 'I should be connecting it more, and I could, but it's pure diversion, yeah.'

Reflection on TE, CP, EP and JK

The entryways of these four herbalists highlight the influence of family, childhood aspirations and the experience of seeing the benefit of taking herbal medicines for themselves and others. The narrative of TE is the most relatively disenchanted of all the cases' engagements with herbs, coming close to Weber's idea that rational thought can 'master

everything through calculation', although this very idea is arguably an enchanted one. Thus databases and peer-reviewed articles replace traditional knowledge and energetics in TE's practice, even if the lack of scientific knowledge of herbs means that arriving at a prescription is a 'slightly frustrating process'. TE's case demonstrates how his engagement with science is a political act, making him acceptable to the GPs, to whom he exists in a dependent relationship. However, the case shows that the congruence of TE's way of doing herbal medicine with the GP's way of doing orthodox medicine fits so well that TE calls his own professional identity into question.

The remaining three cases do not reveal enchanted crossings between humans and living plants in their entryways or in the rest of their narratives. However, hints of enchantment are seen in relationship to the personal experience of taking herbal medicines, in the attraction of theory and in the pleasure of woodland. Thus, CP relates to *Vitex agnus-castus* through her experience of taking it as a medicine and through prescribing it to patients. Her knowledge of this herb is largely based on her experience of taking it and prescribing it, even though her training in Chinese Medicine encourages her to think more theoretically. EP, on the other hand, moves in the other direction, away from the empiricism of her WHM training and towards the sensual theory of Chinese Medicine that provides easier correspondences between diagnosis and treatment than she found in WHM. And JK keeps her practice, and the 'pure diversion' of spending time in her wood, as separate entities, with no crossing between the two.

We will now look to those visible entryway herbalists who identify, in their narratives, the importance of knowing their herbal medicines as living plants. This ranges from simply knowing living herbs through spending time with them in various ways, to the development of more formal methodologies.

SB

Entryways:

SB traces his involvement with herbs back to when he was three or four years old when he used to spend time with his grandmother at weekends.

So I think from that age I can remember every weekend being told about all the different uses of plants, weeds and things and go for a walk in the hedgerows and things. So I was always absolutely in awe of plants and what they could do. And the scents and the smells and thinking about it now, talking about it to you all the scents of the lemon balm has come flooding back when I think of my grandmother in the garden and what she was doing there.

At school he loved chemistry and became interested in plant chemistry. He grew about 150 herbs in his parents' garden, knowing them throughout their life cycle. He dried the herbs and stored them but didn't know what to do with them. When he studied for a chemistry degree, and later a PhD, and took on a lecturing and research career, he left herbs behind him. Much later, when looking for an alternative career, he discovered Simon Mills and Kerry Bone's 'Principles and Practice of Phytotherapy' and said to himself, 'OK, I'm going to be a phytotherapist!' While studying for his degree in herbal medicine SB also worked for a cancer consultancy that gave patients access to complementary medicine. In his role he interviewed cancer patients about their health. When he graduated he set up practice, with about 70% of his patients being cancer patients. He gets referrals from other practitioners, including herbalists, nutritionists, naturopaths and medical doctors.

Orthodox, but beyond

SB spends up to two hours on a first consultation in order to get a full case history. He covers the presenting complaint, past medical history - 'because that's essential for me to understand what's led to where we

are today', before looking at drug history, family history, social history and diet.

And then I'll say because I work as a holistic practitioner I'll then spend the last 10 or 15 minutes of the consultation asking questions about different body systems such as the heart, lungs, digestion, nervous system, just so I can get an overall picture of how you're working as a whole person and to identify any weaknesses or imbalances in the body.

Most of his cancer patients have already been 'prodded and poked so much by people who are far more qualified than me' that he doesn't often do physical examinations. However he will:

...check the blood pressure, look in their eyes if they've got any problems with high blood pressure.....but obviously if I've got someone who's got a pain in their tummy I'll do a full abdominal examination or if somebody's dizzy I'll do a full neurological examination.

While this suggests an orthodox medical approach SB finds that this has limitations:

.....I think the conventional diagnosis is absolutely brilliant because it's a tool but it's only a tool. It's not the only tool. And I think it's an important, an integral part of my practice but it's not enough on its own because I think then again you just get, you get a symptom. You're not getting beneath that to see what the cause is so any medicine you give is only going to treat the symptom. It's not going to treat the cause. It's like if you've got someone with eczema you wouldn't just give a cream for it. You'd give something internally as well. I would, that's where the conventional medicine fails. It only does topical presentation, which doesn't do much but you need to actually get to the imbalances below in the biochemistry in the body. So yeah, it's definitely an important part of my practice the biomedical model but I think also as well understanding more holistically what's going on and analysing where homeostasis has broken down in the body, where there's an imbalance, where something isn't working as it should be. And also as well a little bit of energetics as well working out if the patient is hot or cold or

very astringent or whatever just helps sometimes to get a feel for what herbs are going to work perhaps slightly better for them than others

He addresses his patients as people rather than as diseases:

I treat the person. I think if you try and treat just the cancer it's such a reductionist thing to do. You're not going to have good successes and that's one of the reasons I think why conventional medicine fails so much because it's only treating one symptom rather than the whole cause beneath that. So anyway I see, when I see a cancer patient.....so I do a full case history and go through all the different body systems and often identify weaknesses. A lot of my breast cancer patients I think have thyroid problems, which has a link there with the cancer so definitely see that. I would say my approach is, because of my training in chemistry and biochemistry and working in a hospital it's, some of my point of views are very medical based. So I will diagnose people in the orthodox sense so if a patient came to me for this this and had polycystic ovarian syndrome with hypothyroidism as well so I would see it in that term rather than in energetic terms or anything like that. So very much a conventional diagnosis but I would go beyond that and with other, this patient came in obviously problems with their endocrine system, problems with their immune system and everything like that. So I'd go through the whole person and I wouldn't just treat the polycystic ovarian syndrome or just the thyroid. I would treat other things that were going on as well in my general prescription as well

SB sees his patients as all being very different in terms of what they need phytochemically and constitutionally. Thus he works his prescriptions out for each patient rather than using pre-existing formulae.

.....I think people's energetics, their constitutions are different. Now I always say to my patients, non-cancer patients particularly I've got ten patients with the same cancer in the same place, exactly the same presentation, treat them (with the same prescription) and I'll get different results for all of them. And I think that's been the epigenetics. I think the way that people deal with pharmacological compounds differs so greatly because we're all genetically, tend to be different. So I, that's

why I tend to really work my prescriptions from first principles if I can, just try and work on what I think will work for that particular patient...

Root Causes – onions, triggers and kernels

SB seeks to look at the whole body and treat the different layers of the problem:

....I also think that, I would say that, to people when I'm treating them, treating you is like, it's like peeling an onion. In fact you treat one layer then there's something else underneath and you keep on going down until you get to the nugget of the problem.

SB needs a long case history in order to get enough depth of understanding of the patient, often identifying stressors in his cancer patients:

..if I don't look into enough depth what's going on I can't possibly work out what's going on, particularly with past medical history which is often very convoluted in cancer patients, well lots of stresses and lots of strains. It's not until you dig into that you find out that's the reason. With all my cancer patients I'll say definitely there's been a major stress in two years prior to diagnosis that's led to the cancer developing, well maybe the cancer taking off and growing. So I find it's very key to find the cause of all that trigger so it's very much quite a Sherlock Holmes way of going, delving through the past medical history trying to work out what's been going on and the causes and things.

He then seeks to treat the stressor:

Well I think I find it, well it depends what the stressor is. If there's a viral infection or something like that I might use antivirals just to try and get rid of the trigger that might have led to the cancer from growing, for example. Or if they're very stressed then that will show to me their immune system is down and work on their immune system. Or if that stress was terrible at work because their boss was awful and still going on, say to them, well you need to try to change your lifestyle, work out if actually if staying

with that job is the best thing for you or not and consider if getting a transfer or a new job elsewhere. So I think it's very, again it's, it's not just in my herbal prescription it's in the whole lifestyle thing as well I think it's important to realize that

Identifying triggers for illness is useful for SB because it allows him to seek to reverse the process that led to the illness:

It's a, that system's been used for a long time with autoimmune diseases working out the two or three triggers for autoimmune diseases, then working to go backwards in time and reverse the process of that. So I feel that's quite useful. At least we've identified them. Sometimes I can't. There's nothing I can do. I can't think of any way of doing anything with them. But at least I know they're there and at least I've talked about it with a patient and often I find patients will come back to me the next consultation and they'll say, I've been really thinking about this and I realize what effect it's having on my life. And I've gone and talked to so and so about this and I feel that's cleared...

This also applies to his cancer patients:

I like to work out what is going on, mentally, physically and spiritually....(the cancer) is just something that is going on there and there is reasons why the cancer is there but I see them as a whole person and work out, I dig very carefully to try and work out, because particularly with cancer there are 5 or 6 triggers for a normal cell to become a cancerous cell, a lot of those are environmental or psychological events, if you can work out what they are work to reverse them, then there is a chance you can make the cancer less aggressive...certainly you can make things better

He looks to Ayurvedic medicine for support for his approach of 'going back to the kernel':

But I think, I do think a lot of medical conditions are due to unresolved issues from the past. There's been emotional traumas and things and it has an effect and looking at (Ayurvedic) medicine they say that there's six or seven stages to disease.....and then gradually it builds up to

the macro world sort of thing then. So I think if you can reverse that and look, go backwards then you can actually reverse things, far better, far more long term than otherwise so I think it's the opposite of western medicine where you can, you're just touching the outer layer, not going back to the kernel of what actually triggered this in the first place.

In an observed consultation SB treats a male patient, P, who has M.E. and whose symptoms are moving more and more towards fibromyalgia, and who also has prostatitis. SB says to the patient:

Let's go back to when you originally had your illness triggered...when your immune system was activated.

He identifies two episodes of gastro-intestinal infection as being triggers for the ME and says:

...as the bowel is a problem...I do wonder if things like prostatitis are linked with that because of the sheer proximity of the bowel, having some sort of leaky gut, having some transference around the gut through the gut and out the other side, leaky urotheliumepidymitis fits in with that picture.....the bowel has obviously set off some sort immune reaction.

He talks about the patient's appendectomy that he had 10 years before developing ME:

..the appendix is a good reservoir for bowel bacteria so prone to bowel problems if have appendix removed, bowel bacteria an essential part of the body, without it the enterocytes can't function properly, they die..., they are as much a part of our body as any of our cells are....That is very key, having your appendix out.

Thus, in addition to prescribing herbs that act as nerve tonics and treat pain and fatigue, he also includes the Ayurvedic herb *Andrographis* as a tonic for the gut, even though the gut symptoms have long passed. He says to the patient:

There is a lot going on, trying to hit everything at once is almost impossible, it's like the old onion idea, work on one layer and gradually get down to the nugget. To mix my analogies it's trying to find that grain that has caused the pearl to grow around it.

SB gets a tub of herbal tablets made of *Andrographis*, *Echinacea* and Holy Basil and lets P smell them. 'Wow' responds P. 'Yes', says SB, 'that's the Holy Basil'. They sit silently for a long moment, breathing in the aroma.

Feelings for people and plants

A lot of SB's patients have stage 4 cancers. He feels that his treatments help with their quality of life:

...and yes they will die at some point but they'll die at a time when they're a bit more ready for it....., they've got to the journey where they've actually got to a stage where they can actually accept the death rather than it being inflicted on them

However, remissions do occur:

...there's been a few cases, probably about 10, 15 over the years where there's been a complete remission. The cancer's gone. And that's, that happens anyway so whether it's actually anything to do with me and the herbs who knows? I wouldn't claim that. But certainly it's done something, the process, they've changed their lifestyle, got rid of the stress, done something that's changed the environment that let the cancer grow and it's gone. I wish there were more of those but there are some and there are, they are absolute real wow, amazing. It makes me feel really good about what I do then.

SB loves plants and feels that knowing living plants through their life cycles helps develop intuition that benefits his patients:

I love plants. I love all plants. I think they're amazing beings. I see them as fellow beings, I just, I mean all of them. I really am. They're living factories. They're just absolutely wonderful what they can do. They can do, they're a lower life form supposedly. They can do much more than a lot of higher life

forms can do quite frankly. So yeah, I, before I use herbs, most of my herbs where I can I've grown them so it's like I've bought the seed where I can, grown them as the seedlings and the plants into other plants, harvested them so I know them. I feel in order to know a herb properly you have to have really gone through the stages with it to understand what it's about which is very, totally against what you might think from a scientific point of view. But I think you need to do that and I feel if you know that herb then you know how it's going, who it's going to be useful with in a person.....So there is a huge intuition and I think that does come from knowing the herb. I don't, people who treat herbs just as the phytochemicals in a bottle I think that's just so very, a dead way of looking at it because I think herbs are more than that. There is something else as well. There is some, there is a life force, a vitality in there as well that's, that you need to know about, to understand what the herb's good for.

SB is in awe of the herbs in his garden:

It's one of the most magical things I can do is to go in my herb garden. It's so grounding and no pun intended but it's that sense of majesty, of awe, of being around them. There's a certain, perhaps I'm imagining it just because I want to imagine it but there's a sense of magnificence there. There's something about them that's just absolutely, it's absolutely awe inspiring. I can't think of any other way of putting it. I just, I'm in awe of the herbs. I just, I bow down to them. I feel very humbling in being able to use them, how to help people.

He dries some of the herbs from his garden for his patients, loving how his senses appreciate them:

I do dry them so I will use them for herb, for teas for people and it's nice. I love things like marshmallow leaf so you're, you dry it yourself and it will be a beautiful silvery colour which you buy and it tends to be a bit dull brown, yellowy colour and not particularly very nice but you dry it yourself and it's beautifully aromatic. And raspberry leaf when you dry it yourself you just open the bag and it smells of fresh raspberries. It's beautiful. So it's the whole, all the senses get involved in it, which I think it's essential, so yeah. So I couldn't be without my herb garden. I would never be able to not have a garden.

He needs this contact with plants in order to practice:

I think it's so important to be around I think living herbs. I don't think I could practise without that connection. I think it's essential for my practice.

He also has contact with plants through dispensing his medicines:

I think that it is the life that is in the herbs that keeps me going. I love handling them, fresh herbs, dried herbs, even the tinctures, I am passionate about the tablets even though they are tablets, smelling them, it is a very sensual experience. A lot of people get bored dispensing, but I just love it 'cos I just love looking at them, checking the quality of them, that sort of thing. It's rewarding. I don't think I could be a doctor in a hospital prescribing, it would be too soul-less.....

One of his favourite herbs is *Echinacea angustifolia*:

I love and it's an obvious one. I love *Echinacea*. I think it's a beautiful plant. I love everything about it and I love it as a medicinal herb actually. It's so, so useful. It has so many different activities. It's not the herb I use the most at all but it's one that I know if I use it, it will work. And I love *Echinacea* and I love growing it. I love the *Echinacea angustifolia*. I think it's beautiful. I love it more and more. The more vibrant and showy *purpurea*, actually and its beautiful sword-like leaves and the softness of the silver leaves and the purple flowers and the beautiful seed heads, the spiky seed heads and the lovely snaky roots. So I just think it's beautiful. It has to be *Echinacea angustifolia*.

Reflections on SB

As a boy who was interested in chemistry and then plant chemistry it is not surprising that SB should find a home amongst a profession that has increasingly engaged with science. This can be seen in his clinical approach in that, while going beyond orthodox medicine, he includes it rather than leaves it behind.

SB's entryway experience of spending time with his gran in her garden is not one that talks of being 'called' by plants or of having conversations

with plants. But spending time in his gran's garden is a beginning that engaged his senses over time, particularly seen in the beauty, scents and touch of plants. This entryway 'continues' into his practice in that knowing plants throughout their lifecycle generates a familiarity with living herbs that helps him to select the most useful herbs for his patients. As a child he was 'in awe' of the herbs in his gran's garden, and as an adult he is 'in awe' of the 'magnificence' of the herbs in his own garden. Importantly, he NEEDS the experience of this contact with plants in order to practice herbal medicine. It sustains him. 'I don't think I could practice without that connection.' This sustaining energy may be seen as a sensual-affective energy that helps him to treat patients who are often terminally ill. While he does have other strategies in place, such as meditation and monthly sessions with a psychotherapist who also offers talking help to medical doctors, the inseparability of SB from his herbs - 'I don't think I could be a doctor in a hospital prescribing, it would be soul-less' – points to a crossing of sorts.

For SB it is essential to look for 'root causes', for 'triggers', to peel back 'the layers of the onion', to get to the 'kernel' of the problem. He seeks to go beyond symptomatic management, to find the 'nugget' and treat that, even if that involves going back in time.

How could this desire be related to plants? Deleuze and Guattari (2004) suggest that 'arborescent' thinking, the 'tree model', is the model on which Western thought is grounded. The tree grows from a seed, with a trunk, which branches out, growing and spreading upwards. The phenomenon of the tree is always traceable back to the seed. This thinking, where an origin is always sought, has the consequence of setting up oppositions: what is the cause of the patient's illness? What is not? Thus one position is favoured over another. This thinking is, of course, not particular to WHM, or to SB, but is it a coincidence that herbalists, who use plants, often seem to look further 'back' than orthodox medicine? Thus SB looks beyond the diagnosis of cancer or eczema or ME/FMS, even travelling through time to treat the trigger. SB is not the only herbalist who spends time with living plants. Herbalists, as we shall see, experience them through time, touch, work, smell and

beauty. Being in contact with herbs, which may be followed from flowers to leaves to branches to trunks and roots and seeds, may partly explain the desire to get to the origin of things for their patients.

FD:

Entryways

FD ran a smallholding.

...right from when the children were very little, we'd had animals.....We had zero grazed goats, we had chickens, we had pigs. And it was all really so that we could provide cheap food for the children, and food that we knew what had been fed to it, and where it had been, and what had happened with it. We weren't vegetarian, so the animals were part of that. I had one son, who was allergic to cow's milk, so we had the goats, and of course goats are universal foster mothers, and you can use goat's milk to feed almost anything. The other problem with goats is they're either dead or alive, there's not really any in between, they don't do ill. So what would happen is, if there was a problem with the goats, it would be very expensive because you'd have to call the vet in, and in the end, I started off by reading a herbal handbook, 'The Farm and Stable', by the French lady, Juliet de Bairacli Levy, who is now dead, I understand she died, I think she died about eight, ten years ago. And I read her book, and the way she talked about rearing animals, and, by inference, rearing children made a lot of sense. So that was the sort of introduction.

While continuing to have an interest in animal welfare FD initially studied a one-year introductory course in herbal medicine. During this course, which had a biomedical orientation, she became 'bogged down in DNA', fascinated by the work of Watson and Crick and eventually decided not to study to be a veterinarian but to complete her professional herbal medicine studies.

Up against authority – professional life, Gerson Therapy, and statutory regulation

During FD's career in herbal medicine, she has felt 'up against the authority' of her professional life. This started during her training where she observed that some students were favoured over others:

...you became very aware that you didn't upset people, because if you did, you might not pass your exams. It was that bad, and I wasn't, it wasn't me being paranoid, I know from talking to a lot of colleagues over the years, that actually that was their experience as well. If you weren't in, you weren't in, and you were likely to not pass your exams...

FD, along with five others, made a formal complaint:

So my political career started quite early, and it wasn't particularly pleasant.

She viewed the university delivery of herbal medicine training as a progressive move, because she saw it as 'taking away the personalities'. Later she worked at a CAM clinic where she identified poor management practices and also found that some conditions were not being adequately diagnosed:

I like to see things done right, or how I perceive right. I like to see things done in particular ways with particular processes. I like to see processes in place, so that if the people change, the processes are still there.....But basically, what I discovered was that there were things not in place, which meant that actually this whole set up was dodgy. Not necessarily intentionally, it just hadn't been done properly.....So that, one of the consequences of that was that it made me very unpopular, and the herbal medicine was fine, but I started to find that patients were being sidelined to other practitioners, not herbalists, but other practitioners, so they were being diverted away from, which was a bit disconcerting. And the other thing was, I was getting patients coming the other way who were turning out to be seriously ill, because other practitioners were not picking up, they weren't doing the diagnosis that we'd been trained to do. So patients were coming, this approach hasn't worked. This hasn't, and then I'd be saying, no it won't work because actually this patient needs to be having medical treatment because there's a real medical problem here.

Later she worked at another clinic, where she identified conflicts of interest:

....none of the people on the board of directors could actually claim to be completely impartial. Every single person had a vested interest in what was going on. And the documentation simply had not been put in place properly.

FD also trained in Gerson therapy, a therapeutic approach to supporting cancer patients involving an organic plant based diet, raw juices, supplements and coffee enemas.

I then came back and worked for a while as a Gerson therapist.... but again, the bloody politics, oh it was awful. I had something like 80 patients, in the end, over a period of two years, and you were working with people with cancer. And because Gerson tends to be the last resort, it ought to be the first, it ought to be the first thing that anybody does.....If a person with cancer at the very first indication of having cancer does intensive dietary intervention, and intensive therapy and sustains that, it, you can bring the body to the point where it can turn the cancer around. That, without a doubt, that is true. The problem was the people that I had come to me were terminal.

She found that patients were coming to her from other practitioners who were wrongly diagnosed, or poorly treated or not under the care of an oncologist.

.....and then realized that I was getting people coming to me who had been under other practitioners, and I was doing their assessments, and they were coming to me in crisis, a lot of them. And it was, OK, but why are you doing this? And why are you doing that? You've got this going on, that going on, why are you doing those things? That was what the practitioner said I could do. Well not sure that that's actually appropriate, and there were all sorts of things, again as a medical herbalist, people that had been working with them before were nutritionists. Nutritionists are not expected to do diagnostics, so they were putting people on a therapy and there was no obligation on them to check some of the diagnostic stuff. So I had patients coming to me, and there is an obligation on me, to check the diagnostics. And I was finding that, just as an example, there was one woman, who

had been told she had myeloma, and when I went through all the details, she didn't have myeloma at all, she didn't even have cancer. And she'd been put on the Gerson therapy, which involves using thyroid and Lugol's, which ups your metabolic rate. When she came to me she had hyperthyroidism. And she was really, really, really ill and she was being told by the practitioner, it's all in your mind, it's psychological. And she'd lost huge amounts of weight, she was in a terrible state. And we did turn it round, we turned it round, I wrote a long letter, a long report, a long summary to her GP, said this is what's going on, this is why she's like this. She's not paranoid, she's, this is why she's like it, this is what needs to happen. And with the GP and a herbalist who was more local to her than I was, we turned it full round. But she was very sick for a very long while. And I was getting people ringing me up, they'd been to the Mexican clinic, and the Mexican doctors are supposed to be supervising them. And one phone call, the chap, I could hear his wife screaming in the background, and he was telling me, and he said. I'm with, we can't get hold of the clinic, they won't give us any help. And I said, is that, what is the noise? He said, it's my wife, she's in agony, and I said, how long's that been going on for, a day, I said, I'm sorry, but even if it's a healing crisis, if your wife is in that much pain, there's no healing going on, you have to get the medics in, and they got the A&E in. I got into trouble for that, I said, well, I'm sorry but you cannot allow, there's no way that that woman is doing any healing work at all, she's in too much pain. JD rang me, and wanted a herbalist to look after him, he was staying in London. And I said, well, OK, fine, who, because again, you have to have an oncologist on board, who are you seeing? I'm not seeing. OK, I can't take you on unless you are. How are you monitoring what's going on? I didn't hear any more for a little while, and he came back again, it was about 18 months, and he said, well I've done the therapy, and I'm cured. And I said, OK, so did you see an oncologist? No. How do you know you're cured? Well, I've done the therapy.

Her concerns eventually led FD to withdraw from practicing this therapy. As well as the above institutional and political conflicts, a larger authority was also problematic for her. This was the possibility of the statutory regulation of herbalists:

Very early on, almost within a year, a couple of years of qualifying, I remember going to one of the conferences and Philip saying it was like the Sword of Damocles hanging over our heads, and actually, he was quite right, that is exactly how it feels, that is exactly how this whole registration process feel, that at some point, this sword is going to drop down and that's going to be it. And I think that's been my whole experience of the political thing.

In particular, she was concerned that statutory regulation might lead to the scrutiny of her practice:

Is somebody going to turn up with a clipboard, and start tick boxing? How I'm working, my, how I operate my dispensary, whether I'm doing my CPD.....

FD reflects that her involvement with politics has dominated much of her career as a practitioner:

Yeah, I know, it's what I do. It's what I've done all my life, stood up and said, no this isn't right, and then get shot down. And I'm just, even just talking to you now, I'm thinking to myself, where's the herbal medicine in all this, because actually it's all politics, and that's been my career.

Finding home in a community:

FD lives with her husband in the grounds of a Christian religious community, having moved there when their children grew up. There is also a guesthouse for up to 20 visitors. FD goes to most of the services – four prayer sessions per day plus meditation. FD looks after the library, prunes the apple trees and makes curtains and some clothes.

FD has had a religious awareness from a young age:

There's always been an awareness of other, right from being very small. I come from I had a very dysfunctional family, very violent early life. And I think there was always this awareness that there had to be something else other than this.

FD's religious relationship is with Jesus rather than with the Church:

I know that I have a personal relationship with the man that died on the cross two thousand years ago. That's my personal belief, it isn't anything more elaborate than that, because anything more elaborate than that is man made. All the theology that's gone on for 2,000 years has just created total confusion, people don't understand and they get, they then get to the point where they're fighting over what the interpretation of this word or that word is. And that's not, that defeats the whole object. Defeats the whole point of it. So for me, and if you talk to somebody about that, and you say to them, well this is my personal belief, but I can't say to you, go to that church or that church, because whatever church you go to, it's flawed. It's a flawed system.

She had visited the religious community many years ago when Jesus spoke to her:

And what is even more astonishing, and which I didn't say at the time, was in 1992 when we came here as a parish group, originally, a very first visit here I sat in the church over there in tears because a voice in my head was saying this is your home, and I'm thinking, don't be, and I literally said to this little voice in my head, don't be so bloody stupid..... how can I be at home here? And then I thought about it and I thought, oh you silly thing, what the voice actually meant was it's your spiritual home, in other words, you come back here and touch base every so often. No that wasn't what the voice meant, the voice actually did mean *this* is my home, and that's been. That voice has been something that's been constant from the age of about three onwards, I've been aware of that.

A near-death accident, and knowing herbs differently

During a holiday to the Isle of Skye, on an Easter Sunday, FD had a serious accident leading to a meeting with Jesus who told her that it was not her time to die and that she had more lessons to learn:

I fell down a mountain, I fell 200 odd feet, bounced apparently. But I actually, I slid down like that, and then tipped, and that initial tip is the only thing I can remember. Because from that point onwards, I went through the tunnel, I had a life review,

as far as I was concerned I was dying, I wasn't going to, I wasn't going to survive, falling that far, I really wasn't anticipating coming too, basically. And I don't know how, I think it took about three, four minutes, but it seemed like a very long time, but I don't, my husband, Arthur, says, you just literally bounced like this down the thing, which I'm laughing at but I don't suppose it was funny. And this great feeling of peace and light, and this voice that there was a life review. And this voice saying, it isn't your time and you have to go back and the lesson is to learn to love...

Yeah, it was (Jesus) that I met when I fell down the mountain, because I had this near death experience, and sent me back. Much to my disgust, because it sent me back and told me I'd got to learn to love, and I thought I did. I've got a family, what more do you want? I've got children. Yeah, that's not what I'm talking about. That's easy, it's easy to love your family, well no, it's not that easy, actually, because I don't speak to my mother. But theoretically, it's easy to, easier to love your family..... The difficulty is loving the people that come here who can be thoroughly obnoxious. And who are coming with so many so much baggage, that you think I don't want your baggage, go away. But the thing is here, that we're supposed to treat them as though they were Christ. We are supposed to treat them as a, if He were to walk in the room, how would I treat Him?

Since the accident and 'life review' FD has developed insight into patients that she didn't have beforehand:

And I can look at somebody, who I can see, somebody can walk in the room and I keep thinking, oh yeah, OK, they've got so and so, and so and so. The chap that's staying here at the moment, I knew he had something seriously wrong, I knew it was something that was involving his whole body and was serious. I didn't know that it was diabetes, but I knew that there was something not right, and that it was something that was going to cause real problems. And sometimes, I can say, yes it's, they've got a tumour here or there or wherever, and I just think I really didn't want to know this.

Since her accident and life review, FD has become uncomfortable with using herbal medicines that she hasn't had direct experience of as living plants:

And ones that I've, and things like Ginseng and *Ginkgo*, which I have actually experienced in their home, when I went to Korea last year, I ate my Ginseng and *Ginkgo* berries, and I, they feel like old friends. So I would use those quite comfortably, but things like *Corydalis* and stuff like that, I think, no this is not, and even *Bupleurum*, stuff like that, I would look at it and say, no I'm not comfortable, I don't know these as, I don't know them as plants, I don't know them as, and therefore I'm not comfortable.....I need to know the plant, I need to have an image in my head, of what the plant looks like, and what it looks like growing.

FD compares how she saw herbs before and after her accident:

They were just medicine, I was a tincture herbalist. Quite happily prescribe, stuff without really, I didn't know what *Cimicifuga* looked like, I didn't know what *Caulophyllum* looked like, I didn't. Now, I really couldn't, it's almost, putting the integrity back, this is, if you don't know the plant what are you doing using it? If you don't know what it looks like and you don't know how it grows, and so I can quite happily use *Atropa* because we've got *Atropa* down the garden, in the meadow, and *Solanum dulcamara* - bittersweet, because they're down in that, and Meadowsweet we have down here, and I can use, even quite serious stuff, if I've got the image in my head of the plant, and know what it looks like, but not, and interestingly that's articulated itself just this afternoon as we've been talking, thinking, yeah, that is what it is.

She also finds that she understands the trees that she cares for:

Well the trees tell me what I'm supposed to do with them, because I prune them, and they tell me when I'm standing in front of them. Say OK, I've just done some yew trees, and I'm standing there, and it gets easier, each time, because the communication is easier each time, so OK, it's that time of the

year again, you have to have a haircut.....it's all intuitive, it's all instinct. Nobody's ever taught me to these things, I've read the principles, looked on the internet and said well what am I trying to achieve here, but at the end of the day, the tree's a living thing, what. So, I won't be doing any more after the end of this month because they'll all be growing, and that hurts them, if you do that.

A helpful tree

Two years after her accident she had only 10% shoulder movement. Her doctors said that an artificial shoulder was required and an operation was scheduled. During the interim FD travelled abroad to undertake some Gerson therapy training, where she experienced a 'healing crisis':

I went out in the May, knowing that when I came back I was going to have to have this surgery. But, I thought well, I'll go and do that initial training.....And you'd do the therapy for a week. On day three I had a huge healing crisis.....and I'd gone for a walk, and there was a tree, and this voice in my head was saying, go and talk to the tree. Oh don't be stupid, this is ridiculous. Go and stand in front of the tree, OK, stand it front, now put your arm on that branch there, OK, fine, OK. So I put my hand, I lifted this arm up on to the branch, got the hand hooked on to the branch. And then couldn't move, because I couldn't lift it up to get it off, and my weight started to pull on it, and there was the most horrendous cracking and crunching and God knows what else going on. I'm thinking, oh I really did swear, I thought, I've dislocated my shoulder, I've really done damage here, this is frightening what's going on. Eventually I managed to disengage myself from the tree, went back to the cabin, and actually it didn't feel too bad. But I was very concerned, and that night, I went into this healing crisis, which I didn't recognise that that's what it was. My shoulder was on fire, it was absolute, I was in agony. Absolute agony. I just wanted to go home, I was running a temperature, I was in a terrible state, had roaring headache felt really, really ill.

The next morning she found that she had more mobility in her arm:

Part of the Gerson therapy is you have coffee enemas. I went to do a coffee enema the next morning and I'm lying there having this coffee enema, and quite without thinking, I started scratching my arse, it was really, with the hand that was damaged.....my butt! So I was sort of lying on the floor and I'm going like this and I'm thinking, I suddenly realized what I was doing, because that arm could not reach, and because I went into the next workshop, 'I can scratch my butt!', and they all, 'what?' What the hell's this woman talking about? And basically that's what had happened.

She went to visit the tree that had helped her the previous day:

And I then went, that was that day, the next day, I walked up back where the tree had been, and the tree had been cut down. Wasn't there any more, and I just stood there absolutely in pieces, the tree had gone! They'd cut a number of trees going up the track and it was one of the trees that had gone. And I just, I thought I don't believe this, I really don't believe this.

She came back to the UK. She was terrified at the thought of the surgery:

I was absolutely in a state, and I went for my pre meds, and I was literally shaking, every single muscle in my body was shaking, and they said what's the matter, and I said, well, I just am absolutely terrified, I just don't know whether I want to have this done or not. And really just to convince me that I needed to have it done, they sent me down for an X-ray, basically to prove to me that nothing had changed. Except that it had changed. And when they put the, there was a long delay, I was sitting there thinking, what's going on, and he called me back in and he showed me the two pictures, and in the November, the shoulder was dislocated and right down here somewhere. I'd come back.....and the shoulder was in the socket, and the movement that I had, he then, he showed me that, and I said, oh, it's relocated. He said, yes, he said, we don't know how that's happened, and I told him about the tree.....

The consultant told her that a shoulder replacement wouldn't improve her range of movement any more than it had increased since she had gone abroad. There was no need for her to have the surgery any more:

.....and apparently according to the consultant, I'm the only person in the country where that's ever happened. Everybody else that's had that sort of injury has ended up with the shoulder replacement, because it's the only way you get any mobility back.....

Wise Woman versus Professional Herbalist

FD remembers, in the early 90s, attending a herbal conference of her professional association when the dress code had been relaxed. She saw a tension between the 'traditional' and 'professional' herbalist.

It was the first conference where they didn't have a dinner and dance where everybody was dressed in formal evening wear, and they did the foxtrot and the waltz, and all this sort of thing, and they had a Ceilidh. But it didn't go down too well with the older people who felt that it should be much more formal.....and I think there still is this tension between the traditional role of the herbalist, rooted in village life, which is the medieval wise woman, rooted in village life, somebody slightly up from self help, but not in the ranks of being professional physician. And these professional men who had fought.....who had fought to establish herbal medicine as a profession. And as a profession on a par with doctors, and there was this definite dichotomy between the two...

Rather than seeing herself now as a professional consulting herbalist, as she had in the past, she sees 'patients' on a much more informal basis:

Somebody came to Mass here a couple of weeks, not that long ago, two, three weeks ago, and she came in, she was in Mass and part way through Mass she came out, and at the end of Mass which was about an hour later, Arthur came across to find me and said would you go and see this lady. He said, she's sitting in the loos, in tears. Why? She burned herself before she came out. She'd actually poured boiling

water on her knee, from the kettle, straight onto her knee. And she didn't stop, she just came out, so I grabbed my lavender oil, and my, and a bandage, and the nearest thing I could get hold of which was just a clean hanky and my marigold cream and went across, and put lavender oil on it, and stuff. And as I'm doing this, I'm trying to do it very surreptitiously because there's two nurses, well there's two nurses in the congregation, there's two nurses in the community. I'm just, OK, well we'll do this quietly, nobody'll notice and the, and I put this, I put the lavender oil on and I put the marigold, slathered marigold oil on, because I'd treated Arthur with steam burns, so I knew it was perfectly OK. Covered it all up, said to her, just don't do anything with it, just take it home and sit quietly, and of course one of the nurses just happened to come in. What have you put on it? What have you? You shouldn't have put anything on it. I just said, I've done what I've done, and it's fine. I've done it in my professional capacity, it's not a problem. And she got the message, the woman rang me up later on and said, actually the pain went almost as soon as I got in the car and she, it was a blistered burn, and she was fine. She said she's got a lovely butterfly now, she says it looks like a tattoo of a butterfly.

Her informal practice of herbal medicine often takes place within the religious community where she lives:

And that's the sort of herbal medicine I'm now practicing. Stuff like that, I say to people, why don't you try a pot of this, or a pot of that? And I will make people up mixes, because I do know quite a lot about people's backgrounds here, like you do when you're in a community, you know some of their backgrounds. And I will make up, but I will make up stuff that I know isn't going to be any problem in terms of stuff they might or might not be taking. I had a gentleman with, who was having really, really bad problems with IBS, and I just said to him, you need to take chamomile tea. Six weeks later, he said that's amazing, I can't believe that that, and he's fine. And then the same chap sitting in church, and he had a funny turn, and you look at him and you could see straight away that he was cold. So I grabbed a coat, somebody had left a coat, like you'd left that there. Grabbed it and put it round him.

Said, right, you need to get warm, and then sitting at the end, talking to him, and one of the nurses, who works, no she's a physio, not a nurse, works in cardiac rehab, oh we'll reassess you next time we're at cardiac rehab. And I said to him very quietly, I said, what dose of your heart medicine are you on, and he told me and I said, I think you need to go back to your GP and ask for that to be reassessed, I think you're on too high a dose, and your blood pressure and your pulse and everything are too low.

And also within her broader social village community:

I've got one lady that, yeah, another lady that was absolutely hysterical, it was actually Arthur. Arthur met her in the supermarket, she was in a terrible state, and he said, I think you need to ring her. He said she really is desperate. I rang her, I went round and talked to her, and it's taken a long time, because she was mentally, she was in a really bad way, with what had been going on. And we just gradually, gradually, gradually over a period of about a year, without any, there's no, not been any formal stuff at all. Very, I've been making notes, but she's not seen me making the notes, very, very gradually brought her round to the point where, actually she's now 100% better than she was, and actually it was to do with the medication she was being given and the run around that she was getting with the NHS. And we just sat, and have taken it a bit at a time, and talked her through it and worked through it to the point that she's now working perfectly normally and she's fine.....Stuff like that really. Yeah. That's up to date, really.

This move to a more informal, community-based herbalism is something that she has seen other herbalists also being drawn to, including herbalists who had previously been vocal in advocating increasingly professionalized practice. She remembers attending a herbal seminar:

It was inspirational what people were thinking about but I'm thinking, these are the people that when I first qualified were telling us we need to go down the registration route. And now the things that they are talking about are community herbal projects and the village herbalist stuff.....These are the people that having pushed, and pushed, and pushed

registration to everybody else, they've now decided in their practices to go back to working, and I just think, OK, so where are we with it all now?

She remembers having a conversation with a herbalist who was involved in the politics of statutory regulation:

She'd come back from yet another interminable meeting..... and she just, I asked her how she was, I said, I 'm not interested in the politics, I'm not interested in any of that. How are you as a person? And she looked and she stood there, and her eyes all welled up, and she just said, I have realized that it's all a waste of time, because actually the most important thing is love. And we just stood quietly, and we just stood with that, there wasn't anything else to say. And I look at it and think, this is the problem, we've got so bogged down in all of the politics and people telling us how we should be doing it, that actually what it's really about is sitting with people over their kitchen table even, and listening and then offering whatever happens to be around in the kitchen or around in the dispensary as a love offering for the person to try to see if it helps. And yes, you can put that into a more complicated therapeutic setting, but at the end of the day it's very simple.

Reflections on FD

FD said that Juliet de Bairacli Levy made a lot of sense talking about rearing animals, 'and, by influence, rearing children'. However, this was the closest she came to any sort of enchanted human-nonhuman crossing in her entryways. Furthermore the first part of FD's narrative was resolutely disenchanting in that her engagement with professions was foregrounded. In many ways she struggled with her professional life, identifying the problem of favouritism in her herbal training, as well as political difficulties arising out of being involved with the bureaucracy of organizations. Outside herbal medicine she encountered difficulties in her engagement with Gerson Therapy, when her concern over the lack of non-herbalists' diagnostic skills eventually contributed to her decision to withdraw this therapy from her practice.

However, it is clear that in many ways FD was acting along the ethical guidelines that Wahlberg (2007) has identified as being established for various CAM professions, irrespective of the therapy practiced. Thus, for FD, the importance of conduct, competency and responsibility in the activities of the profession as well as in practice can be seen in her manifest desire to see the influence of personalities removed from herbal training, to have bureaucratic processes in clinics that outlive the participation of individuals, to remove conflicts of interest in running clinics, to ensure that procedures are followed by organizations, and in raising the issue of poor diagnostic skills by non-herbalists. This combination of professionalization and bureaucratization may be seen as part of Weber's apparent disenchantment of the world. Furthermore the near absence of therapy-specific details from ethical guidelines can be seen to be mirrored in FD's question about her own narrative – 'Where's the herbal medicine in all this, because actually its all politics, and that's been my career.'

It is when FD starts to look outside the profession that we start to see crossings between humans and non-humans, namely between FD and Jesus, and FD and plants. While FD has had a personal relationship with Jesus for most of her life, crossing the human with the divine in what can be seen as an enchanting relationship, it was only after her accident that she developed personal relationships with plants. After falling 200 feet down a mountain and having a 'life-review', Jesus told her that it was not her time to die, that she still had to 'learn how to love'. Following this event she found that she had lost interest in the 'exotica' of herbal medicine, preferring to only use herbs that she knew as living plants and that enabled her to 'have an image (of the plant) in my head'. The enchantment of the voice of Jesus and of plants came together in FD's encounter with the tree branch, when she was told to put her arm on the branch, with the subsequent series of events, starting with a 'healing crisis', leading to the improvement in her shoulder condition and the last minute cancellation of replacement shoulder surgery.

While FD's narrative started with various political disenchantments, her relationship with herbs later became foregrounded in the necessity of

knowing her herbal medicines as living plants. And paralleling this move towards knowing and using local plants there is also FD's move towards practicing in a more informal way, as part of a community: an offering of love across the kitchen table rather than in the consultation room.

GA

Entryways:

GA grew up in a family environment without any exposure to herbs, but remembers reading a book that got him thinking:

I remember reading the Herman Hesse book, 'Narcissus and Goldmund', and Narcissus is a young monk at one point and he's asked to go out and pick some herbs. I think, in my head it's St John's wort. I'll have to re-read it and check whether I've got it scrambled over the years but the house I grew up in, herbs meant my mum's cardboard tube with little, like a squashed Smartie tube. A cardboard tube with a little plastic lid on it, 'Pearce and Duff's mixed herbs' and it went down about three pinches in the 18 years that I lived with my mum and dad and it was still in the cupboard another 10 years later. So in my experience herb, herbs were something you had this pinch of once every three years and in the book he's sent out to pick a, and he comes back with a sack of it and I remember reading the book and thinking, sack of herbs?

As a youth GA found refuge from council estate life by spending time in the countryside.

I grew up between, on the cusp of two housing estates with the usual kind of working class shit that went on between boys at that time in the '60s. So people from one estate say, you live on that estate, and they'd beat you up and the people on the other one, you'd just pick on people from the other estate because they were your enemies. Living in between both I got picked on by a kid from both ends and although I had friends I think it seemed quite attractive to me to just get away from the whole damned lot so I just spent a lot of time out in the countryside and as I grew older developed friends that liked to go for walks and bike rides and I used to just go out and at some point by about 15 I just got

interested in tasting plants as well as trying to identify them. So I was interested in birds, animals, I was very interested in frogs and toads, reptiles, gradually taught myself flowering plants and I think I got an early copy of 'Food For Free' and started tasting things and didn't particularly pursue anything particularly herbal but it was just about getting to know my plants....

His interest in Western herbs grew when a girlfriend was ill:

A friend of mine, a girlfriend of mine got ill and went to see an acupuncturist and the acupuncturist gave her some herbs and gave her some English herbs, well, a mix, amongst which I think was yarrow. I said, well don't buy it off her, I can go out and pick it for you, and it rekindled something about Western herbs

GA then studied at the School of Herbal Medicine. He also spent time in the countryside:

I lived on a little smallholding..... The school at the time was in Tunbridge Wells. I lived about ten miles away and lived in a caravan and my rent for the caravan was a day's work a week on the smallholding, part of which involved growing herbs. So I felt I got an extra education by being in the countryside and growing stuff as much as being at the school really and was seen as a bit of a maverick in the school because I was somebody that just wandered around tasting things all the time and I assumed that everybody else would be the same

GA was very good at plant recognition. He remembers one of his exams:

....they did a funny exam at the end of the herbal course in those days and ... would take you into a room and it was just to do with plant recognition, so it was a very minor thing. You'd be in there for 15 minutes and you had about 50 plants laid out, just all around the room, it was in one of the labs, and he'd randomly pick out 10 and he'd give you a score out of 10 of how many you recognised and I went in and they said, it's pointless doing this with you, you'll know all of them. He said, I'm going to give you the one that nobody else has recognised, and it was Gypsywort. I said, 'it's Gypsywort'. He said, 'ten out of ten, get out'.

Transformative energy

GA looked to bring other interests, from outside of his training in herbal medicine, into his practice:

From the early '80s, when I've began studying herbal study but formally, alongside that, I'd developed quite a strong interest in shamanic stuff and my reading of shamanic stuff was more anthropological than New Agey but it felt like there was something very important in there that I was trying to get hold of that I wanted to bring into my practice and I tried really hard with it the first couple of years and I thought, I don't know how to integrate these two and it was, there didn't seem to be any way of integrating the two interests to me, and I certainly don't want to bang a drum and sing something to my patients. I just, I want some things, that kind of transformative energy in my consultation and I think I gave up, I couldn't find any way of doing it. I gave up.

In order to help patients change their habits he studied Neuro-Linguistic Programming (NLP):

I remember particularly having one patient who was a builder who had colitis, who between working every day and going home would drink several pints of beer..... it would make a break between his work day and his home life, and I felt with him if I could make him change his habits I could probably get to grips with the other, his illness but I couldn't do it with herbs alone and I didn't have the skills to get him, to encourage him or to get him to change his habits and there must have been other people that had the, I had the same feeling about but I just remember him particularly and it gave me some incentive to do a NLP course because I thought it would give me those skills, and I did an intensive with Richard Bandler and, I've forgotten his name, McKenna, TV guy who's crap on telly but he's brilliant lecturer, and it completely changed my practice and in a way it gave me some of that thing I was labelling shamanic. It gave me a way of working with a different kind of energy and it gave me a way of integrating with, finding a different way to converse with patients and it was interesting

GA saw a theatre production based on the work of Arnold Mindell and his work with coma patients. This led to training in 'process work' with Arnold Mindell, which enabled GA to help his patients to engage with their illnesses in a different way:

A great little story, a mixture of storytelling, theatre, no props, the best, it had one examination couch and bits of tissue paper, that was it, and I was really interested. I'd listened to the show with a kind of NLP head on and I just thought, this is really interesting. If this is real representation of what this guy did I'm intrigued, and I decided there and then that next time Mindell was in the country I would do some training with him because I'd got in my head that he was old and I needed to catch him before he died. As it is, I've been doing stuff with him every year for about the last eight or nine years and again, that resonated, it was just another way of working that's given me a basis for working with patients. So I think I've ended up with, I think the skills that I brought to being a herbalist were being quite good at a listener. Patients often say to me, oh you're really good at being a listener. I tell you things that I've not told other people..... I can't keep count the number of times people have told me stuff and said, this happened 20 years ago but I've never told anybody, I've kept it sealed up, and I felt like I needed an adequate response to that stuff rather than saying, oh, you should see a counsellor, especially because a lot of people in this country will engage with something that's seen to be about dealing with physical illness but they won't go and see a psychotherapist or a counsellor. So I had an aptitude to listen to people. I think the NLP gave me a few more skills about finding what resources people had inside them to make their own changes and break bad habits and the process stuff has learnt me to engage with people by talking about their metaphors for their illnesses as though they're reality.....

GA gives an example of a patient who was helped by his new understandings:

I had a policeman who used to come and see me, quite a heavy, high flying armed response unit with ulcerative colitis and over a period of time we got him quite a lot better and then he had a flare up. I changed the herbs, I tried to change my approach, couldn't quite work out what had caused the

flare up. So he was sat in front of me and I just said, what's it feel like? I don't know, it just hurts. Shut your eyes, focus in on what it feels like. He said, feels as if it's knotted up. What's knotted up? I don't know, something inside. So try to, by finding language which coincided by him, his and getting him to focus in on it, just got him to follow the image and he said he'd got an image of guts being squeezed and it look likes something's been twisted and it, follow the end of it and I just followed him wherever it was leading and just kept prompting him to stick with it rather than open his eyes and come back to talking in a more normal way and it lead to a succession of images and then suddenly he said, it's about, he said, I'm at X. He was at the X disaster when it happened, tried to save some guy's life and this guy died in front of him. So then he talked about that and we talked in a more conventional way about that and what he remembered and he came back the next month and I thought, we'd had quite a weird, within generally day to day conversation, it was a very weird consultation that we've had. I was expecting for him, and he came back and it seemed like he had no memory of it. He just said to me, oh I don't know what you've done but that last change of herbs seems to have sorted it out. It's all fine now. I've had no more bleeding from my bum, everything's gone and it's sorted, my pain's gone, and I think, sometimes because it's just off of somebody's normal map they, they've got no way of engaging with it, it just kinda vanishes.

GA describes how he helps a patient to engage with the metaphor of his illness as if it was real:

Another guy had really bad colitis pain and I just said to him, if I had to be, I have to imagine your pain in me, what's it like? And he said, oh it's like three metal rods stuck into me.....it's like they're real metal rods. He said, that's what it feels like. I said, well, this might sound a bit odd but just imagine getting hold of one. Yeah. I said, well, pull it out. He went, I said what's that like? It feels better. I said, well, take the other two out then.....So, and then people look at you in bafflement, so, oh, what's going on there? The, it's just finding those methods for, and little tricks that sometimes are a long term cure for things, sometimes they only work for five minutes but some of

those things for pain control work, teaching people effective pain control and stuff like that.

GA has his own particular focus when engaging with patients, although he does not necessarily see this as being the 'root' of their problem:

....I'm quite cautious about, I think we make a lot of wrong assumptions about the aetiology of an illness. So for my own approach, I tend to focus in on the psycho spiritual end of stuff but that's just because it's my interest. I can think of osteopaths that maybe work with somebody with ME and saying, this is tight here in this particular place. It's come from this. They think that because they can treat something by, because something is a successful treatment that the aspect of what they're treating is to do with the aetiology of the problem. My feeling is more that everything's connected and maybe what I'm tackling is not the root of the problem, it's just something that's interesting to me and if it works and if it works for them then that's OK but I'm not saying that because I'm tackling the psychological end that everything's psychologically.....psychological aetiology.....

A herbalist in a GP practice and in a CAM practice

GA works in a GP practice and also in a CAM practice. His patients in the GP practice tend to be unemployed working class, and in the CAM practice they tend to be employed working class.

In the GP practice his patients are given a disclaimer stating that they will be given medicines that are not on the standard drugs lists. Also, the GP's have to sign his prescriptions. GA is unable to dispense his own herbal medicines - this is the responsibility of a pharmacist at a local pharmacy:

The chemist or the gaffer there is older guy who when I went round to negotiate with him I expected him to say no and he, he's known for moaning and cussing, oh another bloody thing that ah, and he moaned for a bit and then he said, yeah, I'll do it. And it's proper medicine, none of this blister pack rubbish. It seems to be quite good to be involved in making something up and putting it into a bottle.

GA goes to weekly practice meetings:

It is very much an old style GP because when we have case history meetings somebody will say, where are they ... so and so, are they next door to the dealers and isn't so and so on the other side? It's his wife, and it's like, yes.

He feels able to speak freely:

I think they respect that more than somebody who just sits in the corner and thinks, oh don't like these statins..... My work there initially was appraised and evaluated and seemed to having success but I think since then it's been mostly trusted that I'm going in a good direction and I get, I talk to a lot to doctors in the corridor or somebody that's referred something. It's a lot of informal feedback. I'll just stick my nose in the room and say, so and so that you sent my way, blah, blah, blah, blah, blah

Although GA is influenced by 'transformative' NLP and process work, he also uses a purely medical approach if necessary:

The more, the longer I've been there probably the more confident I am about describing things within my own terms. It'll depend sometimes on different patients. I had somebody referred to me with IBS stuff relatively recently and they just, they know I've got a good track record with that kind of thing. After I'd seen her the second time I just thought, this isn't IBS, this is gall stones, and I threw it straight back to the doctors and got them to refer through for ultrasound and yeah, it was gall stones. So sometimes it's very much a medical thing. It's like, actually, I've got this feeling, this person's presenting in this way but have they been, and I've often sent people out for blood tests or, so on that level I'm talking in very much pathology, anatomy, physiology terms.

GA is respected within the practice for his abilities with difficult patients.

One of GA's patients had been to see a consultant:

.....and basically the consultant was saying in the most tentative way (in a letter), this guy's an asshole. He was just really horrible, and one of the ... doctors showed it to me and I

said, oh yeah, it sounds like him. I said, why are you showing me this? And he said, just know that you're good at challenging him, maybe you can take it up with him? I said, OK, fine....

GA describes one of his GP practice patient's:

It's a bit of a nightmare at the doctors and I frequently ask people what they eat. One of those people that was late this morning, the 15 year old boy, I just, who has got weird psychological things going on. Mum thinks he's got ADHD, doctor doesn't think he has. I just said, so what do you eat? Just run through an average school day, yeah, a school day, what do you have on a school day? Well, I get up and go straight to school, maybe have a packet of crisps in the break. He was there with his mum, 15 and a bit. What do you have lunch time? I have chips and a curry, which they go, he goes out and gets at the local shops. I know the shops, they're kind of horrible. What do you have in the evening? Oh, it depends whether I come in at the, bit of pizza maybe. Does he eat vegetables? Oh yes.... well, some days. So once a week, and that's quite frequent in that area and I just looked at him, I thought, he smokes. I said, how many do you smoke? 20 a day. I said, you're at school, you're 15, how do you afford 20 cigarettes a day? And his mum said, oh he buys them out of the dinner money that I give him

At his CAM clinic a patient is more willing to engage with dietary changes:

So it's just getting people to think about it and sometimes forcing them to. They come up with the answers. I had somebody in this room a couple of weeks ago, they said, and I, we came up, I said, we need to discuss diet don't we? And I kept throwing it back at her and in the end I didn't make a single suggestion. I said, and then you know, if you did that what would be better? Oh, this would be better wouldn't it? But would you actually eat that? Well, that's a good idea but no, I wouldn't eat it. But what would you eat? Buh, buh, buh, buh, buh, oh that, that, and that's crap. That one's good. So she just, she had built her own diet by then. I just, I didn't, I

thought, well this is good and I said to her, I said, have you noticed I haven't said any of this?

St Cuthbert and the pleasure of small signs

GA uses mainly herbs local to him:

So I would say at least 80% of the herbs I use are either native to (the area where he lives) or grow in people's gardens around this area. So I may buy some in.....but unless I feel I've got a connection to the plant I don't really know what I'm doing with it.

When GA was starting out in herbal medicine he felt there was something missing:

I was desperate when we were training, I felt, really felt the lack of a unifying philosophy behind what we did.

However, he now is less concerned with having a philosophical or theoretical underpinning:

The longer I've been in practice the more I don't give a damn really.

Instead, he feels that his practice is based on the firm foundations of his plant knowledge:

I feel like I've always known my plants.

GA remembers a patient who had had insomnia for years. He made a suggestion to her:

This might not have anything to do with (the patient), but felt I should offer it. Was there a need in her life to pray? 'Pray?' she asked, 'To whom? To what?' I made a guess as to what might be appropriate, 'to the earth maybe?' Perhaps she should go to an ancient site? 'No', she rejected that straight off. While she was not a Christian, if she was to pray, it should be in a Church, a big Church.

She thinks of the (local) Cathedral as being nondescript, she decided to go to Durham.

Several weeks later she reported the results of her pilgrimage. Although it was far from natural for her, she had knelt and she had prayed, and in turn St Cuthbert had spoken to her. Her insomnia had gone, sleep was now easy. Now I resolved to visit myself. Maybe St Cuthbert would speak to me. Andrew came with me. We looked at what the Cathedral had offered us. We climbed the tower but St Cuthbert was silent. Perhaps, foolishly, I was listening with my ears.....Sometimes I try too hard to hear the voices of the plants.

Despite not hearing the words of plants, GA reflects on the pleasure of being a herbalist, that he is 'sustained by the plants all around'. He remembers walking along a canal with another herbalist:

....looking for traces of the Skullcap that grew there the year before. Jubilation at finding a dead twig and a couple of green leaves. The delight of a walk with other herbalists, taking half an hour to walk half a mile. 'Oh look, a plant!.....oh look! – there's another plant!'

Sometimes medical students sit in on his consultations. He remembers taking one on a walk:

In a gap between patients, I take a medical student for a quick scout around the grounds outside the medical centre. It's a grim urban environment but there at hand is Dandelion, Mahonia, Hawthorn. She tastes the astringency, the bitterness, and the gloopy mucilage in a leaf of Plantain. We pick Lemon Balm with which she makes tea. Comparing the immediate generosity of this plant medicine with the sterile anonymity of pharmaceuticals, she wonders about retraining as a herbalist.

When he makes St John's Wort tincture, he waits for a particular moment:

Even if I made gallons, some of it has to be in a glass jar, for that magic moment when the green leaves and the yellow flowers turn the clear liquid instantly red.

I rarely hear a voice, but in some way I have heard a little of what the plants have to tell.....I let go of the need for

some great epiphany. I revel in the offerings and omens of small signs – Daisies by the wayside, Liverworts by the steps. In the murmurings of the wind through the leaves the plants are speaking to me all the time.

If I can listen to the voice of the owl and read the trace of the fox in its scent, and sense what the Cow Parsley says to me, perhaps today I may also hear the silent words of St Cuthbert.

Everything I do is herbal medicine

For GA, herbal medicine is difficult to define:

The herbal medicine is the thing everything else feeds through. So if I read a novel, I only read novels that I'm interested, that I think I can learn something psychologically from. All the psychological learning, most of my CPD stuff the last ten years has been more psychological than herbal but it goes through this for everything, I think it just goes back through the herbal thing and so the books that I read or the music that I do give me more language and more metaphors and a wider possibility of communicating with people that I see as patients...

Herbalism is a bucket, or a compost heap or a treasure trove into which I put, or through which I process, all my learning and all my actions.....Anything that I do with the patient, - THAT is herbal medicine.

And yet, somehow the focus on plants is a little narrow. Years ago I had an interview for a job with the RSPB. 'So, are you a birdwatcher?' the interviewer asked me. 'No', I replied, 'forgive me but I think bird-watching is stupid!' I explained that I would find the idea of going out to just look at birds, or just to look at plants, crazy. I want to look at everything. He offered me the job.

Reflections on GA

As a young man, GA spent much time in the countryside. He was interested in tasting and identifying plants. This concern for spending time in nature may be seen in his later narrative in that he mostly uses herbs that are native to his area or that are grown in local gardens, i.e.

herbs that he knows as living plants. He needs to have this 'connection' with the plant otherwise he doesn't 'really know what I am doing with it'. So knowing plants this way, through spending time with them, is to be found as an entryway and in his later narrative.

However, as a young man, GA was also interested in wider nature, for example, in foraging, and in understanding birds and reptiles. This encompassing of something wider than simply herbs and plants may also be seen in his statement that 'herbalism is a bucket, or a compost heap...', that includes, in his practice, knowledge of herbs but also his interest in the 'transformative energy' of NLP and process work, as well as orthodox medical knowledge. As he recounts, when going for a job interview at the RSPB, he wants to look at everything.

A second entryway, of realizing that he could pick yarrow and use it as a medicinal plant for his girlfriend, is paralleled in his eventual career as a herbalist.

GA's entryways are not obviously enchanting, especially given his minimal exposure to herbs by his parents, who used three pinches of Pearce and Duff's herbs in 18 years, although his memory of thinking 'sack of herbs?' when reading Herman Hesse, may have subtly hinted at his future.

However, GA's experience of spending time in nature and tasting herbs are sensual experiences, even if there is no suggestion of human-nonhuman crossings. Also highly sensual is his engagement as a herbalist with helping patients to treat metaphors as if they are real. A visceral sensuality can be seen in the experience of two of GA's patients, one who pulled metal rods out of his abdomen, and another who followed his squeezed and twisted guts to a disaster scene.

Also enchanting is GA's description of sensual experiences – of the 'pleasure of small signs' when he sees 'Daisies by the wayside and Liverworts by the steps', when he anticipates the transformation of green leaves and yellow flowers into red tincture, when he is delighted at simply finding another plant on a herb walk and when a medical student tastes the 'astringency, the bitterness and the gloopy mucilage in a leaf of Plantain' and considers training as a herbalist. While he had no

'epiphany' in his experiences with herbs, they 'are speaking to me all the time' even if the words are voiceless.

These voiceless conversations with plants, that came after his entryways were completed, may be seen as crossings between GA and the non-human. GA's crossings with plants may be seen as paralleling his work as a herbalist, where he merges the two distinct spheres of orthodox medical knowledge and transformative practices. And furthermore, it seems likely that his sensual experience with plants and nature provide an affective energy that sustains his practice.

MN

Entryways

MN enrolled in medical school but left after one year:

We disagreed on certain major philosophical points and it was their university so I left. But it was, it was a, it was a very surreal experience, it was a, it was a very strange experience.....what I was offered was a medical training, learn this, do not think. Thou shalt not think. This is, this is the established stuff. There's just so much to learn, all the anatomy, all the biochemistry, all the physiology, here's Guyton.....Learn this, and the human being is nowhere to be seen. So I'm afraid I didn't, I didn't really see eye to eye with it all, which is a shame because that's what I wanted to be all my life, to be a doctor.

He decided to grow herbs:

And people, 1980 people really hadn't heard of organic.....But I'd been fired up by what I'd discovered about the food industry, I became vegetarian at that point and so I earned some money, came over here and started growing herbs....

The work of the French herbalist, Maurice Messegue, became important to him:

...he produced a beautiful herbal, Health Secrets of Plants and Herbs, which is a wonderful book, and I came here and started

growing herbs. It just, that sang to me, well if I couldn't be a doctor then I was going to be a herbalist.

He heard about the School of Phytotherapy, but decided to delay enrolling, preferring to get practical experience growing herbs:

But at that point I thought, well I could go down there but they're probably going to talk about herbs that I can't grow here and they're probably going to talk a lot about the pharmacology of it all and how much are they going to be concerned about whether it's organic or not, and that whole bit. So at that point I decided not to go down there, and wait, and I lived here four years and grew herbs and read Messegue's book, that was a key thing. I had one herb book and it was, it's great, and that's enough.

When he had a firm enough foundation he decided to study herbal medicine formally:

Also, before that, I'd gone back to, I decided I was going to go down to, now go down to the School of Phytotherapy and study and get, I was ready now, I felt I had my own philosophy and my own knowledge of, practical knowledge of herbs.....digging and hoeing and all the rest..... so I felt I was ready to go down.

Krebs Cycle and Ayurveda

During his studies MN engaged with the science-based curriculum:

It's not something we should be frightened of. The Krebs cycle is just beautiful, it's an absolute, you know, electron transfer chain, it's awesome, awe inspiringly beautiful and yet it's taught in a way that, oh God, people groan about it, oh the Krebs cycle. Not fully appreciating that if it wasn't for their own Krebs cycle going on they'd be a pool of molten jelly

In line with his herbal medicine training MN draws on orthodox medicine to model his consultation:

And I see that, the first part of diagnosis is through a western medical model, that's what we were trained in..... And so that's what you use. And I would, my argument is that it's not,

there's nothing wrong with the western medical model per se, it's just not done. Do you know? You take a detailed in depth consultation, which you need an hour for, first visit, you do a detailed clinical examination on the basis of that. You work out a diagnosis on the basis of those two things combined, you come up with a differential diagnosis and then you come up with a treatment strategy.

He follows the medical clues that the patient reveals:

I remember waking up in the middle of the night one night and going, Addison's disease! and this patient had been coming back, getting ill and couldn't quite work out what was wrong with her. And she had this amazing suntan and yet it had been a crap summer.....But just being able to, it's like a detective story and my mind likes that, picking back, going back....

While his training gave him lists of herbs for particular conditions, this didn't satisfy MN:

And so I left with a lot of, with the idea that I would go into practice, and I had all my arthritis herbs and people would come in with arthritis, I would give them arthritis herbs, and they'd get better. And people came in with skin problems, I would give them, I'd look at my best skin herbs, people talk about skin herbs, and I would give them that, and they, they would get better. But as Voltaire says, a third of your patients get better, a third of the patients stay the same, and a third of the patients get worse, which doesn't seem to me that, that good a batting average.

As well as valuing science, he also recognizes another side to herbal medicine. He remembers meeting a herbalist:

So, and my first encounter with him was, he said, so what do you think about raspberry leaf M? And I talked about the tannins, and all the rest of it, and all the stuff I knew about it, and he said, oh, that's interesting, because I've always thought it as a warm furry blanket. And I was just like, ah ha.....Stopped in my tracks, because here, here was somebody that obviously knew a lot and was brilliant in clinic, and wasn't entirely concerned..... didn't share my concerns about the different acids.....there was other stuff going on.

And so that was a big turning point for me, that, that there was, the, the scientific side was interesting, but the artistic side of it was also equally interesting, and equally important.

After his training he decided to bring other influences into his practice in order to 'break up your lists'. He describes what he means by 'energetics':

Well I suppose it's a term we coined to encompass first of all the different traditions, TCM, Ayurveda, humoral medicine, as the three main strands of human, main human history in terms of that. And so you have an idea that when you're treating this complaint, I mean humoral medicine's interesting, for instance phlegm, if you're treating phlegm and you put too much heat in, in humoral medicine you can harden the phlegm at the beginning. So it gives you an energetic, I would say energetic's about treatment strategy as well, it's not just the herbs in terms of their energetic qualities, and that's quite simply hot or cold or moist or dry on one level. It's also about a treatment strategy so in humoral medicine you would loosen that phlegm before you put anything too hot in there, and that seems to make, still seems to make sense to me. It's arcane, archaic knowledge and language but it still, human physiology hasn't changed since Culpeper's day really, in that sense. You know, humans haven't changed physiologically that much, and going back to the whole thing about Hippocrates, and Hippocrates was very interested in climate and the effect of weather on people, and that makes a lot of sense to me. So it gives you, it breaks up your list. Is this a warming diuretic or a cooling diuretic, a warming expectorant or a cooling expectorant.....I mean I think every system and every complaint has a potential to be examined in that light, because otherwise you might as well just open a shop and people come in with arthritis, you give them your arthritis mix.

Goethean Science: knowing plants

As well as using orthodox and traditional energetic knowledge as resources for his practice, MN also seeks to include spiritual understandings:

And I would say that you could look at giving herbal medicine on a physical basis, and treating a symptom and propping up a physiological pathway, but I think there's also, I would say there's also a spiritual element to herbal medicine. There's some indefinable thing that, what you would call the spirit of the plant, does something as well. Which is difficult to talk about, but I think it is important.

This meant seeing herbs differently:

.....you should also encounter the herb as, give it the courtesy of looking at it as something, as an entity in it's own right.

.....I can certainly sense that, you know, when you're picking meadowsweet or something like that, there's a sense that meadowsweet's flowering all over the rivers of X... And there's a sense of a wider entity than necessarily the individual plant you're picking...

MN seeks to provide a method for bringing lost knowledge back to consciousness:

We've lost that, as modern people we no longer have that innate capacity to, to read the book of nature, and I think we, traditional people would, certainly, maybe it's just heightened individuals within that tradition do, but that's my experience. And so what we're trying to do is to bring that, what, the work we saw as doing, is bringing that into consciousness, that unconscious connection to somehow bring it into consciousness....

MN and his wife, also a herbalist, met a scientist who was investigating an 'alternative approach to biology':

.....we encountered a woman called LT..... and this was a woman who listened to plants. We thought that sounds like interesting stuff, and so we, we began to work with LT, and she'd been trained in Germany at the Goetheanum, in the Steiner tradition. She'd been a biologist, and then she wanted to, she'd, saw the way that that was going in terms of cloning and, and all of this, and, and reacted against that and did her training, studying an alternative approach to biology. An

alternative approach to science, which is, and that's what we've done ever since, it's what, what we've based our, our life study on.

Thus MN turned to the work of the German poet, naturalist and statesman, Johann Wolfgang von Goethe (1749 – 1832), to engage scientifically with the subjective side of plant knowledge:

.....Goethe certainly sang to me, and, so a scientific method to embrace the subjective. Goethe saw science going very much down the, the, the microscope had just been invented, the telescope was getting better and better, this, these whole things were, were taking off, but he felt that the human being was the most perfect instrument. The human being if, if awake was the most perfect instrument to, to ascertain, to, to, to read this book of nature, and it's sticking a microscope on, onto somebody could perhaps just imbalance them, because you've increased the amount of input, but you haven't increased the amount of capacity to deal with that input. And so LT's point was that, that in Goethean science we're trying to improve the scientist, not just the machine.....

For MN, Goethean science provides a way of understanding how the physicality of plants may be useful:

And so it's immersing yourself, and it's spending time with it, learn its growing process, and what, what we do, what we talk about is rebuilding that experience, and to give you an inner experience of that plant. So you know the physicality of it, you know its, its, its lifecycle, and its, its growth patterns, and its history, and it, ultimately all, also it's pharmacology, and then you're trying to wrap around that Goethean scientists saying, encompass all that, but put something else around that, that gives you a more holistic picture of what you're trying to study. And the physicality of the plant then has information, dandelion and horsetail are, are two diuretics, how would you use them differently? And if you look at the physicality of dandelions compared to horsetail, they're very, very different. Is there information there that's worthwhile? Does the physicality of how, how horsetail grows and reproduces, and, and its whole lifecycle, is there information there alongside its pharmacology

to guide you in its use? Seems a reasonable endeavour to me?

Goethean science is normally practiced in groups. MN and his wife have developed a seven-stage process. The first of the seven stages is 'First Impressions', whose aim is to capture the 'mood' of the plant through coming to the plant with an open heart. After meeting the plant each person tells the group one or two words which relate something of their experience of the plant.

So what we're, what we're attempting to do here is to then take to, to go to the plant, have a, have a, have a first impression, have a subjective impression of the plant, as if you, prepare yourself as if you're going to meet somebody, meet a person. And that is giving, for some people that's giving too much to a plant, saying that they have some kind of being out with their physical being. I don't, I don't have too much of a problem in that consciousness if it's about, doesn't seem, for me it doesn't seem to stop. When I study physiology, that sodium ion seems to know what its doing.

The remaining 6 stages are 'exact sense perception', which involves the gathering of factual information from observing the physicality of the plant in minute detail; 'exact sensorial imagination', where the facts are 'put together' or moved between; 'glimpsing the being', where group meditation 'rebuilds' the plant from memory while participants simultaneously observe for their emotional and other responses to this process; 'being the being', where participants join with the 'essence' of the plant; 'catching the essence' where the 'intention' of the plant is sought; and 'incarnating the idea', where the idea is 'grown' into a remedy whose preparation and dosage is experimented with.

Throughout these stages the aim is to stay as close to the phenomenon of the herb as possible:

The point being that as soon as you start to study an organic being, you've got a problem, because you, you're trying to stop it. Modern psychology stops the human body, and looks at the

bits, but then it's very difficult to build that back up again from the bits. So how do you study it without stopping it, without killing it?

And Goethe even says how quickly we kill something with a word. We're studying something, oh it's, it's a daisy, all the all the perceptions and the concepts come through, so how can you, how can you think without conceptualizing, that's the, that's the challenge.

Goethean Science: knowing patients

For MN, plants have more in common with people than others may suspect:

Plants are inside out, upside down humans.....because it's their it's the amount of light, shade, water, climate, impinges entirely on their form, you can read, if you look round here, you can see the trees are windblown, you can see the wind in the trees, yeah? And whereas the human being, it's pretty much preformed, it doesn't, it doesn't keep growing after a certain stage, and it's the inner life of the human being that, that expresses whether people are succulent or dry...

It was MN's wife, RN who thought of using the same methodology to understand patients that they had developed to understand plants:

So it was then, R who thought well could we apply this to, to the human being, and she's certainly embraced that, and probably done, we, initially we started off, the idea was to do it as a group, so we'd have the two of us in the, in the consulting room at one time...

They also identified the importance of patients making a decision to be well:

And this is what R came to, she, she's saying well, when people decide to get better, there's like, it can be like a snap decision, and they never look back from that. Sometimes it's the first, they, the first spoon of the medicine they take, I've heard that loads of time, it will be the first touch of that medicine, people hail me as a genius in taxis all over (the city), whether it's deserved or not, but that was their experience.

They, this guy gave me this bottle, and I took it, the first spoon of it, I never looked back, OK, I went to see him for a few months after that, and we, we did this, we did that, and that was important, but it was that, that was initial, and R took that to say, did that person decide that that, did part of that person decide to become well at that point? It's difficult to say that, that physiologically the herbs had that effect.

But here's an opportunity to, with, with our patients to really engage with them at a deep level, to really help them find out why they're ill. And if they can make a decision to be better, rather, if, if they can change their mind about being ill, it can change their, their blueprint in some way, if they can change something in there, then so much the better.

Herbs and intention are then brought together in the consultation:

R talks about it in her Goethean consultations, that the herb is an indicator of your new intention, it's to remind you of your new intentions, taking the herb is a lot to do with that. And that's kind of the way I practice more that you're using the herbs less as something that's trying to replace somebody's physiology.

A Goethean Consultation

MN meets his patient J for a first consultation. MN gives J some paper and pastels and asks him to do a drawing of how he is feeling at the moment, saying that he will do one as well:

it can be as abstract as you like, the colour as important or even more important possibly than the form...just let it flow.

MN says:

you're coming to this with a question, is it fair to say? So focus on the question...how do you feel about your general health, can you express that?

When they have finished MN asks J if he is ready to talk about his drawing.

J describes how his picture reflects how he is isolated by pain and lack of energy and that 'things have got to change' and how he would like to save his failing relationship and to continue being a good parent, from which he gets most of his pleasure.

MN points out that there is a swastika shape in J's drawing, but that it is in the Tibetan Bon direction rather than the Nazi direction. MN then describes what he drew: that while he sees a bright happy side - 'this is your girls' - J also uses work to stop a dark, sad, melancholic side from getting through.

They then discuss whether this makes sense to J. MN prompts J, who talks about his relationship with his partner. MN then asks about J's physical symptoms, pointing out how particular symptoms confirm J's medical diagnosis, but J keeps returning to his relationship. MN points out that if J had less pain and more energy he would have more time for everything else, including his relationship. MN then asks questions about J's medical history, family medical history and social life before moving on to questions that cover each of the body systems.

MN then asks J to go into the herb garden:

.....take your time walking, look at the plants and encounter and see what kind of plants really call you.... What we're trying to do, you've got a new intention....get a fresh start....it's making that agreement with yourself that things are possible. To take that back on board again. Together with the herbs and what you can do, hopefully we can get to the pain and break that cycle....

MN asks J to keep his intentions focused. MN then leaves J alone in the herb garden. J walks slowly and quietly in the garden, taking a route around the herb beds, pausing to stand eye-to-eye with some fennel, before moving to Willows that border some of the herb beds and protect the smaller herbs from the wind. He stands there for several minutes, before returning to the consultation room.

MN arrives and says:

so what we are going to do next is....what we call the rebuilding stage. Sit back, close your eyes....we are going to

rebuild you between us in our imagination, in our minds and there will be a natural progression from where you've been, where you are at onto, naturally progress onto where you want to be. So perhaps if I can, start, to give you a flavour of what we are talking about – sitting before us is J...

MN then describes J, giving his age, occupation and appearance before saying:

J gives off a sense of interest, excitement but underlying this is some deep sadness and pain in his life situation at the moment.

MN then says 'pass' and J understands that this means that it is his turn to speak. J refers to himself as 'J', talking about how he wants to find a solution to his relationship as well as physical illness. 'This is what he wants. Pass.' The conversation passes between J and MN like this as they cover his medical history and how it has affected him. MN describes how there may be an opportunity to:

dispense with the need to be in pain, which you could look at as being the need to be punished, for, well, we all have long history of crimes in our head for what we have done, haven't done. So perhaps it is time to have a look at those things, and put them into perspective, to see if they actually are all relevant or if it's old stuff that we can let go of.

MN also suggests that J:

has to make a conscious decision to open up his life - life has become a bit narrow for J, social life outside the family, there's not much he does, just for himself, sauna, swim, that side of things, has dried up...

After this point J switches back and forth between referring to himself as 'J' and as 'I' until he settles down into using 'I'. At this point MN refers to J as 'you'. They agree that J needs a courageous heart but that he also needs to be different so he can be attractive to his partner again. MN says that:

....possibly the best way to approach it is to be that different person, to come back as a breath of fresh air. Whatever happens to be that person...to release outcomes, even though the outcomes seem to be crucial, in one sense take it out of your hands. So it's that flexibility that you talked about, to say I'm going to be me and enjoy the rest of my life, whatever happens around me, no other person has power over my happiness, I can be happy whatever happens, and that's kind of what makes us attractive.....So we see a new J with a new intention, flexible, spontaneous, fun seeking J with a courageous heart, mainly to fight for something, able to relax about the outcome...

MN brings J's attention back into the room, then says:

Now we are looking towards a plant remedy that will remind us of that new intention and help the physicality and help our bodies to honour that.

The next part of the consultation involved both MN and RN and takes place in the herb garden. They each carry a garden chair with them. MN asked J to hold his intention and to go to wherever he feels drawn. J walks to the Willows, as he did the last time he was here, and sits in his chair. A little while later MN and RN join J, all three sitting in their chairs in front of the Willows. They sit quietly for about ten minutes. Then they discuss Willow. J says that he had stated quietly, in his head, his intention to be strong, generous, flexible, energetic, pain-free, courageous and Pan-like and that after being drawn to Willow, had asked if Willow could reveal something to him about itself. J reported getting a feeling of soft warmth in the middle of his chest when he did this and the feeling that this would be useful for helping his pain to go.

MN and RN contribute to this conversation, saying that this Willow is generous in its growth rate, growing up to 9 feet in a year, and that it contains plant hormones that are often used to help other plants to grow. They suggest that this growth and generosity may be useful to J: it comes back well after being cut back, as J might be cut back if his relationship ends and he sees less of his children. They also point out its flexibility, that helps it bend to the winds without breaking, but which also

provides support for others. It also transforms boggy stagnant areas into new life.

They also suggest Dock as a medicine, which is growing by the Willow. They select it for its transformative abilities - it transforms minerals, particularly iron, into the plant. Vervain, a great herb of the druids is also suggested, to help transform J's intentions into reality and to connect the different parts of his body. The forms that the medicines should take are discussed, with it being decided that an amulet should be made out of the Willow. J harvests the first young Willow branch then gives the knife to MN who continues. Some Vervain is then picked. They go inside and make the amulet by taking the leaves off the Willow branch and then bending the young branch until it is formed of three layers in a roughly circular shape about 3 inches across. A chain is made out of the stripped outer bark of the other stems. Some Willow bark strips are gently boiled some in water, which turns a thin red colour. The decoction is strained and three cups are poured. They sit quietly as they smell and taste the medicine. Some strips of Willow bark are given to J, along with the Vervain, and a Willow flower remedy in a brown dropper bottle that had been made on another occasion. MN suggests that J get some *Hyoscymus* to help with the pain, and reminds him to take some Dock. The amulet is now finished. MN puts it over J's head so it rests over his chest, saying: 'An amulet of Osea Willow to wear next to you heart'. MN reminds J that the lion that was seeking courage in the Wizard of Oz was also given a medal.

Reflection on MN

MN's entryways relate to the rest of his narrative in a number of ways. Firstly, he had always wanted to be a doctor and his continuing interest in orthodox medicine can be seen in his studying herbal medicine at an institution that was embracing science. It can also be seen in his engagement with orthodox case history taking and physical examination skills as being necessary, if not sufficient, for being a herbalist: the 'detective' work of orthodox differential diagnosis is something that is required for his practice. MN's belief in the importance of spending time

growing herbs as a way of developing a foundation in herbal medicine before studying it academically may also be seen in his later development of Goethean Science as a formal empirical methodology that requires direct contact with living plants, often over their life cycles. Another of MN's concerns in his entryways was that the human being was 'nowhere to be seen' in his experience of orthodox medical training. This concern can be seen in his later attraction to Goethe, who saw the human being as the 'most perfect instrument to, to ascertain, to, to read this book of nature'. For MN, Goethean science seeks to 'improve the scientist, not just the machine'.

Given these two concerns present in his entryways, of the importance of the human being and of knowing living plants, it is maybe not surprising that MN, along with his wife, RN, later developed the methodology of Goethean Science that eventually came to be applied to both humans and non-humans, to patients and to plants.

That such a methodology is possible suggests that for MN plants and patients have more in common than might be expected. Indeed MN said that 'Plants are inside-out upside-down humans'. This implies some crossing between the human and the plant. Further crossings between the human and the non-human can be spotted in MN's understanding of herbs as 'entities', both as 'individual' plants that you can 'meet', and also as entities that exist beyond individuals, 'flowering all over the rivers of X'. Crossing can also be seen in that Goethean Science seeks to bring lost relationships with plants to consciousness.

The various stages of Goethean Science, particularly, 'glimpsing the being', 'being the being' and 'catching the essence', suggest human-plant crossings. One way of looking at Goethean Science is to see it as the upholding the 'epistemic virtue' of 'truth to nature'. Daston and Galison (2010) define an epistemic virtue as 'norms that are internalized and enforced by appeal to ethical values, as well as to pragmatic efficiency in securing knowledge'. The epistemic virtue of 'truth to nature' arose in the 18th Century and sought to identify underlying types and regularities rather than the naturalism of individual objects. This quest for the 'pure phenomenon' could be seen only in sequences of observations and not

in time-frozen moments. Additionally, the 'type' is seen as being 'truer' to nature than any particular specimen. MN's Goethean Science is epistemic in that it is certainly a pragmatic approach to securing knowledge, with its seven-step methodology requiring the human as the only instrument in order to read the book of nature. It is also epistemic in that it appeals to ethical values of interspecies connectivity. And it certainly is a 'truth to nature' practice in that it is types, patterns and essences that are sought rather than isolated instances. While Daston and Galison (2010) identified truth to nature as arising in the 18th Century, at the time of Goethe, it does not necessarily become extinct under new conditions, as long as it addresses a need for acquiring knowledge. And MN, a twenty-first century practitioner, is not alone in WHM, as we will continue to see, in identifying the importance of understanding plants outside the realm of orthodox 'objective' science. Daston and Galison (2010) suggest that both the historical and contemporary focus on 'objectivity' is in fact due to fear of the subjective. For MN, Goethean science seeks to find 'a scientific method to embrace the subjective'. MN's Goethean consultation with J can be seen as a structured method to embrace the subjectivity of the patient and guide him to listen out for a plant, in this case Willow, which will help him to identify and maintain a new intention - 'to be flexible, spontaneous, fun seeking, with a courageous heart, and relaxed about outcomes'. Patients and living plants are brought together in the Goethean consultation. Given the above, MN's knowing of living plants, through spending time growing them and through Goethean science, may provide a sensual affective energy that helps to sustain his practice.

Reflection on visible entryway herbalists: the pull of enchantment

While TE walked the straight road of relative disenchantment, arguably as close as it is possible for a herbalist to do so, the next three cases revealed potential sites of enchantment: CP related empirically and via her own body to a particular herbal medicine which she subsequently uses in nearly all her patients, while EP was drawn to the sensuality of the theory of Chinese Medicine that produces easier correspondences

between diagnosis and treatment than she finds in WHM. JK talked of the 'pure diversion' of spending time in her own wood, but is sure that this experience of nature does not cross over into her practice. None of these cases suggest that the enchantment of living plants impacts on the practices of these herbalists.

However, the cases of SB, FD, GA and MN, while also describing visible entryways, do point to the importance of knowing living plants for their practices. Without spending time in gardens, knowing plants that grow nearby, and observing them through their life cycles, these herbalists would not be able to do what they do, they could not be the herbalists that they are. Indeed the 'awe' that SB feels about living herbs may contribute to his 'arborescent thinking' that helps him to follow clues to get beyond an orthodox diagnosis to the root of the matter. Following an accident, FD becomes aware of the need to know living plants in order to prescribe them as herbal medicines, suggesting that crossings between FD and plants changes which medicines she gives to patients. And herbs that are wordlessly speaking to GA suggest a crossing between realms that can also be seen in GA's method of nudging patients to treat metaphors as if they are real. MN, along with his wife, RN, developed a Goethean methodology for understanding plants using the human being as the 'perfect instrument for understanding the book of nature'. They then applied the same methodological steps to their consultations with patients.

We now turn to those herbalists who had hidden entryways, often at a young age, which involved crossings with plants.

CHAPTER 10: HIDDEN ENTRYWAY HERBALISTS

The next five herbalists, given the increasing professionalization and engagement of WHM with science, have somewhat surprising, hidden entryways to becoming herbalists. The first two herbalists, CT and RC, are separated from the next three herbalists, AF, BC and KA, by entryways that are different by degree rather than type.

CT

Entryways

CT grew up in a mining village and coins a term to describe himself as having, since childhood, a 'NATURphilic' predisposition, simply through spending time in nature, particularly in broad-leaved woodland.

I wanted the woods and not the factory. That was really clear, I wanted to be above ground not under it.

I had an orientation at the start that was naturphilic, I like nature, I felt comfortable in nature. That idea of the God Pan also being the God of panic and being the God of the forests and the forests being a forbidding place to be and nature being a dangerous place, I didn't have that, nature was very much a refuge for me and a safe place.

He remembers being influenced by Native American culture, including the book 'Touch the Earth', by McLuhan:

It said, the trees, the trees talk you know if you can listen in the right way and they have things to say, some things, sometimes about weather, sometimes about the animals, sometimes about events, and I used to sit in the trees and listen to the wind go through the trees and try and understand what they were saying to me. And then one day I took a, there was a, at the animal sanctuary..... there was a farmhouse and it had a library and I one day just took a book off the shelf and I can't remember what the book was, but enclosed in that book was a flyer for the School of Herbal Medicine, College of Phytotherapy as it became, and I took this out, unfolded it, and it was just a description of the course and the fact that you could do a four year fulltime training in herbal medicine, and it

was absolutely, straightaway I knew that was it, that's what I, that was it, that's what I'd been looking for, that's what I needed to do.

Also important for him in his arrival at herbal medicine as an occupation was a 'spiritual orientation' developed as a child, through his engagement with, and questioning of, Roman Catholicism.

So my thing of sitting at the top of the hill and listening to the trees and hearing what they had to say to me I was like, this is how God speaks, he speaks from nature. And so there was always a sense of there is something transcendent and something beyond but it's not this, it's not Roman Catholicism so, but what is it? And finding that in nature.

CT regards having an 'alternative mindset' as also being important for his genesis as a herbalist. In particular, Punk influenced him:

That questioning thing resonated really and that thing, Britain was rubbish at that point, it was boring and awful and grey and dreary in the north at least and oppressive and that kick of, and also that kick of the Punk ethic of anybody can do it, you don't need to be able to play, you don't have to study guitar for 20 years before you can go on stage, you can get on and just make a noise. I still think of herbal medicine a bit in that way, just get some herbs and make a noise.

While having an affinity for nature is not unexpected in someone who ends up using natural products as medicines, his sense of 'naturphilia', particularly seen in listening to trees, is a more surprising entryway to the realm of professionalized herbal medicine that has been described in the first part of this thesis. He also spent time working as a shepherd and living on the land in a teepee, and these were important for him in becoming a herbalist. CT sees his entryway to WHM as being partly due to this 'naturphilia', but also due to his religious orientation and an alternative mindset. These routes are less visible entryways to professionalized herbal medicine.

Professionalization and then de-professionalization

CT has been actively involved in the political life of WHM, for many years as a member of committees within the profession and vocally arguing for Statutory Regulation as being necessary for the survival of the profession. He is now drawn to an approach that sees practitioners as supporters of individual wellbeing rather than as treating conditions.

I think because there's so much, the trajectory of professionalization I think has been so fixed and to some degree I am associated with it because I have been involved with it, that there's a not hearing of some of the more radical things I've said lately at conferences and so on, and I think that marriage to the myth of what is I think a myth, or a delusion or illusion, professionalization I think, has become so strong in the herbal community here that it's not very fertile ground in fact, it's very narrow. And I go (abroad) and they say, oh wow we wish we were in the UK where it's all developed and great and I'm like, no you guys are the cutting edge, you're the cutting edge because you're the ones who are open to doing it in different ways and that's not how, happening elsewhere.

Influenced by Illich (1974; 1995 [1971]) and his perception of professionalization as manufacturing needs rather than promoting self-help, CT questions the professionalization of herbal medicine.

But in America there's, there is a sort of humility that's forced upon you by not being allowed to use some of the medical words and I think that's quite good. And so to think of you, yourself as a more, in a much more humble place rather than aspiring to be a doctor. A lot of herbalists in the UK, their leaflets say, I'm trained like a doctor but I use herbs, which is a rash and unfounded claim actually, but also a dodgy aspiration I think rather than saying, no I'm something different, I stand for empowering your wellbeing. And so the idea of a wellness advisor or a health facilitator or, rather than a practitioner, put yourself in a more humble role, more human role, drop that aspiration towards some kind of mystique or power, I think that would be good.

He sees this questioning of professionalization as being in line with contemporary changes in healthcare:

I think the best thing for the profession to do is to just look where the wider healthcare agenda is, so some people like Simon Mills, who's most notable in this I think, have looked at the self-care agenda in, that's coming up in conventional medicine in the NHS, and looked at ways in which herbalists might fit with the self-care agenda, so it does come into the areas of wellness advisors, wellness educators, healthcare decision maker, helpers, and trajectories like shared decision making and shared decision making tools and online decision making tools, and so on and so forth.

Pharmacology and Psychotherapy

CT describes his approach of combining the prescription of pharmacologically active medicines with psychotherapy:

I think my background really is conventional medicine, because ironically enough, because I like conventional physiology, I'm trained, that's what I'm trained in more than anything else, conventional physiology, conventional biochemistry..... I think the way that the insights that science has brought, conventional science has brought to the functions of the body, that's where I base my thinking, I think of herbs as pharmacological entities mainly, that's my grounding. But then the psychoneuroimmunology is your thoughts, things you hear, experiences you have, they affect your physiology as well, so mine is very much a physiological pharmacological approach, but words are pharmacological agents and they produce physiological changes in the body.

I think we have something that's fairly unique in herbal medicine, we have one, on one hand through that process of the consultation we have the psychotherapeutic act and the psychotherapeutic potential, then we give medicines that genuinely do alter physiology, they do contain pharmacologically active compounds, unlike homeopathy, and so conventional medicine has the pharmacological compounds without the psychotherapy, homeopathy has the psychotherapy without the pharmacological compounds, everybody else is doing one or the

other, and herbalists I think have this really unique position that we do tend to naturally be inclined to do both..

He describes how the psychotherapeutic act in his practice can have a physiological effect:

...spending time gives us the opportunity to do more psychotherapy and to use placebo more effectively in a benign, loving, manipulative, but manipulative way, and just being aware of what you're doing, just being aware of what you're doing and just being aware of how simple that is..... Kieron Sweeney talked about the power of bearing witness and he said, you're apparently doing nothing because a patient comes in with a condition you can't help them with and you just say, that must be really terrible, I'm so sorry that you're having to deal with this, and just sitting in silence for a minute and just letting that shared powerlessness but care sink in, and he said, the power of bearing witness we shouldn't underestimate.....including on physiology, of course on physiology, because nothing happens, nothing happens in the body that is experienced without a physiological mechanism underlying it, so the idea that somebody could feel something without a physiological change mediating that feeling, well of course neurotransmitters are changing levels, of course hormone levels are changing, of course immune cells are adapting. So, I think realizing that, bearing witness is a physiological strategy, it's a psychophysiological strategy but it is a biochemical, it changes biochemistry.....

Furthermore, he recognizes that this approach of his is not a new one:

...it's long been appreciated..... I think it's Thurston, a Physiomedicalist, is saying that essentially it's a combination of the psychotherapy and the herbs and this is early 1900's

CT gives an example of how he takes a psychotherapeutic approach in his practice:

My general thing is the idea of a transition zone or a deceleration zone. There's an architect called Christopher Day who he designs anthroposophical buildings, Rudolf Steiner stuff, right? And he's in the UK, I'm not sure if he's still active, I read an

interview with him years ago where he designed a school I think, I'm not sure if it was ever built but it was a school design with all the oval shaped windows they have and that kind of stuff. But what he talked about was that there would be a car park for the children to be dropped off or parents, blah, blah, and then rather than the car park be right next to the school there would be like a woodland walk or a meadow walk between the car park and the school. And he called it a deceleration zone, so that from the, yeah, I'm going to school, blah, blah, blah, arriving in the car park there'd be a little walk through the woods and then you'd get to the school and by the time you'd gone through the woods you were ready to be at school, so a deceleration zone or a transition zone. So when I see a new patient what I do is just go through the personal details, don't get my, the receptionist takes a few details and puts them on the computer, name and address and blah, blah. I like to check all those, go through those bits and pieces and treat that as a little deceleration zone or a little transition zone from arriving to the consultation starting proper, so rather than going straight into it. So I purposely have in mind that I'm just, the patient will be feeling me out and feeling the setup and so it's that transition zone. And then usually I start with a similar kind of question along the lines about, along the lines of, so tell me what you'd like help with. And then my posture is usually to be, open my hands, sit back and it's about saying, I'm open and I'm ready to receive, I've got time, just tell me in your own words. And then if it works that way I'll generally just say to them, say to the patient, so tell me more about that, keep it as minimal as possible. And what I'm wanting is that the story will come out in their own way, their own priority. My assumption, I'll often say, what is it you would like help with? Because I want to reassure them that I am here to help, that's the whole point of it, and that they're open to tell me what they want to tell me....

But my ideal is that I set the scene where I ask as few questions as possible and the patient somehow leaves feeling that they've been heard and they've told their story and so on..... And that would be my ideal thing that the patient's ability to articulate their story helps them to understand it better.

...but I do think about this, the extent to which I'm doing stealth psychotherapy under the pretext of herbal medicine. And, but I think any sensitive practitioner spending a lot of time with

patients is doing stealth psychotherapy and it's just a question of being aware of that. And sometimes there's a great advantage to that because the patient is not labelling it in that way and you're not using that term and it is about herbal consultation but there's a freedom in which to explore things...

For CT, doing psychotherapy means taking a broad approach rather than following a particular school:

I guess the thing that empowered me to think about herbal medicine in terms of psychotherapy is Carl Rogers.....he said, he said, you know look let's democratize psychotherapy, and his classic three characteristics to the psychotherapist that you have, you view your patient with empathy, unconditional positive regard and, the third one's not coming to me today. But if you do that then you've, he said, and he went on to write a book for teachers and for parents, so people in all walks of, friends, if you're having those characteristics you're doing psychotherapy, yeah. And at the end of his career he said, he said, all those things, what I really meant was 'love', so, and I think too, in that liberated way.

In an observed consultation, CT describes to a patient, using techniques he has learnt from Chinese Medicine, what he learns from taking her pulse. He then questions her on this and relates her answers to her childhood, before coming back to her pulse again:

CT: ...[your pulse is] not classed as fast but feels a bit stimulated, energy not massively deficient, If I press deep, yin level, but when I take the level off, yang, at both levels it is tight, stressed, if we relax that then the energy can come up. So you need a little relaxation. Have you learned meditation?or do you prefer intense physical activities?.....

(CT then takes her blood pressure).

Patient: Sitting here feels like I could just fall asleep.

CT: Your pulse feels stimulated, tense, stressed. You find the energy but it would be nice to have a bit of rest. Maybe the relaxation phase just doesn't happen naturally. Maybe there is a need to curl up with a blanket.

Patient: I would feel guilty...

CT: Feeling guilty tends to come from childhood, is that right, tell me about your dad?

Patient: When I was 13 he tried to commit suicide, he had a mental breakdown, he retired early, and hasn't worked since...

CT: Childhood experiences go deep, is your mother someone who always keeps carrying on?.....

Patient: We were given chores at an early age. They were not big jobs but when you are a child, getting milk, unloading the dishwasher. Now I do everything for my son.

CT: Your father's early retirement, maybe that unsettled you?

Patient: He's lazy

CT: maybe you are saying 'I can do more, I will do more'. Feeling guilty maybe. You *can* have a ten minutes lie down during the day.

Patient: If I felt exhausted I would.

CT: Sow that seed to say that it is ok to have relaxing moments in the day, but also it will be very good for you, it will raise your energy. In the pulse the energy is there but it is pushed, it is stimulated.

A Complex Patient

CT finds that he uses fewer herbs than he used to in complex cases:

And in really complex cases I'll often just use one herb now, what we used to call 'simples', the way of working with complexity is often to begin with simplicity and not complexity, I've learned the hard way.

CT describes a patient with multiple sclerosis:

I remember one particular MS patient, Lizzie, who was so chaotic I just couldn't get a grip on her...I thought about her the next day, meditated on her for half an hour and thought the one thing I know about the patient is that there is so much heat, she is inflamed for a start, an inflammatory process, but she moves all the time, she doesn't sit still, she's flushed, she doesn't sleep, she doesn't settle, she never stops talking....how can I cool her down?That is as basic energetics as you can get is a patient with excess heat. How to cool her down? I used certain herbs with her, like uncured *Rehmannia*, things to cool her down. And she phoned me in two weeks, she had this frizzy, friable hair that was all over the place it was so dry. Working with complex systems can lead to unpredictable outcomes, ok? So she phoned me after two weeks and she said, 'it's amazing' I said

'what's amazing?' She said 'my hair is glossy'. The last thing on earth I would have expected her to say to me. But, in two weeks! She said 'It's hanging down, it's glossy'.but, heat, cool her down!

CT reports that this patient was later told by her neurologist that he didn't consider her as having MS anymore:

[Lizzie is] a fiery woman with really strong opinions and she's a memorable woman anyway. And she's somebody who doesn't suffer fools, so the fact that we've been able to work well together and get the result, she's the one, I haven't told you the rest of her story..... she's moved to Italy, so we do stuff by Skype now, but her neurologist in Italy discharged her two years ago and said, 'you no longer have MS, I don't consider you as having MS'. So she's one that we've been through a long journey with, I've been treating her for seven or eight years, something like that, and after five or six years that happened. And she's completely convinced that herbs have saved her life and everything but then she is a drama queen, and I say that with great affection.

Complexity Theory

CT looks to the cutting edge science of complexity theory to help him understand and develop his practice. Complexity theory seeks to explain complex systems such as weather patterns, insect colonies, the immune system and the brain.

'This is a quote from Francois Jacob, who is a writer in complexity, and he is talking about complexity and evolution and I love this quote because it sounds like us, see how it sounds to you. He says natural selection does not work as an engineer works, it works like a tinkerer, do you know what a tinkerer is, a tinker? Ok. So this is what he says, 'a tinker is somebody who uses everything at his disposal to make some kind of workable object, slowly modifying his work, unceasingly retouching it.' So a tinker is like a gypsy in a positive sense of that, somebody who just has bits and pieces, and they say 'hey, what can I do with this?' and they kind of try something. 'No that's not quite working, what if I put this on? Ah, that's good'. Jacob says this is the complexity of life, this is what evolution is, evolution tries this

on, what about if I do this, what about this colour.....? To me that sounds like what I do with chronic patients....you work like a tinker, use everything at your disposal, dietary advice, meditation, referral to others, herbs, whatever to produce some kind of workable object, a treatment that helps, slowly modifying your work, unceasingly retouching it. Who gives the same prescription twice to the same patient?you tweak things.

CT describes some of the characteristics of complex systems - 'sensitivity to initial conditions', 'attractors', 'nonlinearity', 'self-organization', and 'emergent properties'.

CT views both herbs and people as being complex systems 'sharing many commonalities beginning at the cellular level', arguing that:

.... the place of herbs is likely to be increasingly recognized as the ideas of complexity very slowly filter through into medical practice.....

Herbal medicine is a means of using plant systems to treat human systems – it is complex medicine. The complex nature of herbs does not mean that the practice of herbal medicine is necessarily complex. Rather the traditional medicine practitioner typically stands in awe of the mystery of nature, content to modulate systems activity and modify emergent props by e.g. 'moving the blood' or 'draining heat'. As a greater knowledge of phytochemistry has been gained alongside more detailed information regarding the physiological effects of herbs, the potential for integrating traditional and contemporary insights into herbal practice has arisen. The potential has to date been little realized but complexity theory offers a framework for this task.

Given this perspective he suggests new ways of thinking about herbs.

These concepts include: 'simplicity', 'nudging', 'pushing', 'information', 'tuning', 'attractors/re-configuring initial conditions', 'working at the edge of chaos', 'self-organization' and 're-complexification'.

CT argues that complexity theory has the potential to overcome the reductionism-holism dichotomy:

Reductionism and holism are not incompatible however – each approach can inform the other. Indeed, when the two are separated from each other then the spectrum of understanding has been reduced at both poles. Reductionism set adrift from a holistic perspective tends to abstraction and irrelevance (and even harm); whilst when holism eschews the insights of reductionism it gravitates toward flakiness and incoherence (and inefficacy). The concept of ‘complexity’ offers a means of renewing, integrating and transcending the reductionism-holism polarity.....Above all the reductionist approach is a quest for certainty. The greatest gift of complexity to healthcare may be a means of living with uncertainty.

Reflection on CT

It has been argued above, via Weber, that professionalization is closely linked to rationalization, science and bureaucracy and that the profession of WHM has engaged with these trajectories. However, the case of CT suggests that, at the level of this particular individual, while professionalization has been necessary for political survival, it is unable to provide all the answers, and may even be problematic for practice with patients.

For CT, complexity theory has the potential to reconcile what are often seen as opposites – to unite holism and reductionism, and to bring traditional herbal knowledge together with science. This is much more exciting and enchanting than Nissen’s (2011) assertion that the concept of holism is attractive to practitioners because it can accommodate many different meanings.

CT’s entryways also reveal something of the reconciling of opposites in the blurring of boundaries: a young man who listens to trees; transcendence found in nature yet not separate from an engagement with Roman Catholicism; and the influence of the DIY ethic of Punk yet also the finding of a profession. Looking beyond his entryways he was ultimately drawn back to his ‘alternative’ roots in his favouring of the qualities of the ‘wellness advisor’ over the ‘professional practitioner’. And in his practice both words and herbs are pharmacological agents. Through all these changes CT retains his ‘access’ to naturphilia:

There's a default really, there's a default that I can access and I didn't realize it was, it, it's just, you just think, well this is how I am or you don't know, you don't think about it, but over time I've realized that I do have this basic feeling for nature, this basic confidence in nature.

It is possible that CT's 'naturphilia' is the enchantment that Weber said was disappearing from the world. Furthermore, on an experiential level, this naturphilia, or enchantment by nature, including by herbs, can be seen as a sensual-affective energy, one that allows boundaries to be blurred and opposites to be negotiated and even reconciled. Thus holism and reductionism, science and tradition, nature and religion, punk and professionalism, advisor and practitioner, and words and drugs are easily brought together.

Referring back to Bennett (2001), CT's engagement with the cutting edge science of complexity theory can be seen as an engagement with 'interior reason' – the first wonder of the Kantian world, with his 'naturphilia' referring to Kant's second wonder – nature itself. Thus the complex worlds of physiological bodies of humans and phytochemical bodies of plants can be seen as sites of enchantment.

RC

CT was drawn to the general principles of complexity science to help resolve opposites and to understand herbs and his practice. We now turn to a herbalist, RC, who was eventually drawn to a specific, if more peripheral, manifestation of complexity science.

Entryways

For RC, 'My vocation was established at 4 years of age'. He goes on to say that he, of course, 'didn't realize it at the time'. He remembers running and playing 'He' on a farm, which had a gypsy caravan, on a

warm sunny day. He fell over and smelt yarrow while lying on the ground face down.

I didn't know its name then.....I kept my face in the grass...I was involved with plants without being involved at all.

As a boy he bought a botany book:

You must remember that in those days, boys did chemistry, not biology – that was for sissies.

Also he found at school that he knew things about the human body without having ever learnt them. When he was thirteen an older child of sixteen approached him who had found blood in his urine:

He said he was bleeding...I found myself asking questions like 'how long have you had it? Does it hurt?' Then I heard 'kidney' in my head and I said to him 'If this happens again in the next 24 hours you should see Matron'.

He also knew as a child that the herbs in his Lett's diary were medicinal, he 'just knew', no one had told him.

How did I know that they were medicinal? *Viola odorata* was one of them.

There was also his own illness, when as a young man in France, he was told by the Matron that he had developed a 'crise de foie'. She gave him a large bunch of thyme and told him how to infuse it. It was this that gave him the courage to look at his own illness history:

The medical orderly came along with several neighbours to see how I was doing, made the infusion and explained that the trigger to the crisis was the notorious mistral, the wind that enters down upon the liver, heart and mind, depending upon the disposition of the person and the circumstances in which she or he had been so caught out.....The slow and sure healing process provided me with a meditation in which the medicinal plant served as an

instructor in a way that the silence of previous mainstream interventions had never hoped to....

.....Whatever illness it was that befell this 22 year old in the south of France, it was certainly calamitous and the strength of taste and smell of the herbal remedy appeared like a manifest ally and gave me the strength to contemplate the pathway that had led me to the crisis. The vigour of the thyme dispelled any sense of baffled victim that I might have entertained and gave me back not only courage and strength but also insight: the calamity that drove the illness had a richer history.

The quality of that cure stayed with me and no doubt is why I eventually became a herbalist.

And finally, beyond simply knowing things, his own experience of illness, the sensuality of the smell of yarrow and the taste of thyme, he remembers falling in love with a French aristocrat.

It was dawn. I opened the kitchen door. She had little bunches of herbs.

So RC's beginning includes some visible entryways, such as his own experience of illness, but also some less visible beginnings including the importance of the smell and taste of herbs, and romantic love, and the arguably hidden entryway of simply knowing things without having been taught them.

Finding his Theory of Cure

RC went to a seminary, describing himself as a 'religious child, not pious'. His motivation was partly to please his great aunts, some of whom were nuns. At the age of fourteen he withdraw from that vocation, unable to commit to celibacy.

RC travelled to North and Central America, studying at various herb schools, trying to find a school that suited him. However, they all seemed to have an 'implicit religiosity' about them, which he found unsatisfactory. And sometimes it was more explicit:

The herb school I went to in Guatemala was run by 7th Day Adventists – they didn't really want herbalists, they wanted missionaries and I didn't quite see myself in that role.

In the end he returned to the UK and studied with the NIMH. One of his teachers was Fred Fletcher Hyde, who we have already seen to be an influential political figure in WHM in the UK:

....it was emphasized to me, especially by Fred Fletcher Hyde, that we should treat the patient not the condition. 'There is no such thing as eczema', we were taught, 'but only a patient with eczema'. If this were true, then the answer to the question 'Do you have anything for arthritis?' must be 'No', because there is no such thing as arthritis, only someone with arthritis. Fred Fletcher-Hyde gave quite a number of cold remedies and formulas for this and that condition...so there was an inherent contradiction between a theory of cure and empiricism.

For RC the problem of empiricism can be seen in both orthodox medicine and in WHM:

I once had a patient with a big nasty intertrigo....he went every week to a consultant dermatologist to sort it out...but nothing worked....at the last appointment the dermatologist said, 'Oh, I dunno' and reached for the BNF (British National Formulary) as the patient clapped it from him and said 'No, I'll stick a pin in it and see what we come up with'...that's when he came to me. In a fortnight he was better and had no relapse....But 'sticking a pin in it'? We might as well at the same time have stuck a pin in the BHP (British Herbal Pharmacopoeia)...intertrigo - what is it? - a form of dermatitis- look up alteratives – what sort of alterative? So the patient in this anecdote is drawing attention to the arbitrary selection of remedies and it highlights the problems of empiricism..... empiricism is fine when it works...but what do you do when the remedy fails?

The problem of empiricism is focusing on the phenomenon of the illness itself rather than the path that led up to it..... The reason I am not an empiricist is partly because on leaving the School of Herbal Medicine I had these lists of things that

did this but they didn't work, they just didn't. Hit and miss. Might get a bit better. So that's the reason I am not an empiricist – it's not very effective.

During his herbal education RC found that there was no 'Theory of Cure', rather he just had lists of herbs with the same action (e.g. alterative herbs, diuretic herbs, carminative herbs etc.), with little help on how to choose between herbs on any one list.

In 1987 RC went to Paris and came across Duraffourd and Lapraz's 'Les cahiers de Phytotherapie Clinique' (originally published in five volumes between 1983 and 1996), which 'spoke to me'. The 'Theory of Cure' that spoke to RC has a number of names including 'endobiogenics', 'endobiogeny' and 'terrain theory'. The other main text is Trait de Phytotherapie Clinique (Duraffourd and Lapraz, 2002). RC felt at home in the French tradition. Initially he had difficulty understanding the endobiogenic writings but he kept reading. He describes himself as a 'stoic wandering through treacle... Suddenly, what you do not understand, you can.' He eventually met Dr Lapraz in 1998. RC told Dr Lapraz about how he had had to admit when he was 14 that he no longer wanted to be a priest. Dr Lapraz said that that had 'taken courage'. Dr Lapraz revealed how he had also been in a seminary but at age 19 he heard some girls laughing and singing and could no longer commit to celibacy. Both had nearly been priests.

RC started to learn the 'neuro-endocrine theory of terrain' from the French texts and from Dr Lapraz and found that his practice improved. Endobiogenics is a theory of 'terrain'. Lapraz and Hedayat (2103a) describe terrain as being made up of structure and function, with the former based on genetic heritage and the later being the expression of this constitution in maintaining structure and adaptive capabilities: 'In summary, endobiogeny is a theory of terrain. The terrain assures its own functioning through permanent movement: a constant and unceasing adjustments of its internal equilibrium in the face of inductive and reactive elements. The manager of this terrain must similarly be dynamic, ubiquitous, constant in its association with every aspect of the

organism, and self-regulating. The endocrine system is the only system that meets these criteria, thus it is the manager of the terrain. In conclusion, endobiogeny is the study of how the endocrine system manages the terrain' (Lapraz and Hedayat, 2013a, p68).

Endobiogenics is a global systems approach to human biology. Hence it is part of systems biology (Lapraz and Hedayat, 2013b). However, they regard it as differing from other approaches in three ways: it maintains a focus on the 'global vision of the organism in toto'; it attends to the endocrine system rather than genes as the manager of the body; and it seeks to understand the reason for disease as well as simply the mechanisms (Lapraz and Hedayat, 2013b).

In particular endobiogenics is concerned with understanding very detailed interactions *between* hormonal axes, something that orthodox medical practice is seen as ignoring in favour of the vertical relationships of hormones *within* axes. RC explains:

Lapraz and Durrafourd....realized that this was looking at an end-stage, when someone has Addison's or PCO or diabetes...but that there was a horizontal relationship at the pituitary and a horizontal relationship at the hypothalamic level...

At the level of treatment, Durrafourd explains why herbs are appropriate medicine: 'The multiplicity, ubiquity, and polymorphous nature of the agents that disrupt normal physiological processes is perfectly matched by the plurality and polymorphous nature of the pharmacological activities of medicinal plants. This explains why we chose, very early on, whole plant extracts – or extracts that are as near as possible to this idea – in our attempt to grapple with the complex task of maintaining or restoring homeostasis' (cited in Nichols, 2013).

RC says that:

Lapraz and Durrafourd found that herbs in very small quantities, very small doses, not homeopathic but physical material doses, influenced the relationships, influenced the relationships, every one of those relationships is modified by one plant or another....

During an observed consultation RC identified a patient's knee problem as being related to thyroid hormones and to gut health. The patient, who had thrush, was complaining of a knee problem of several months that wouldn't heal. RC examines the knee closely and says 'you have a cyst – a baker's cyst.....the knee problem is thyroid shock'. RC has a further look at the leg and notices hair loss on a specific area of the lower leg. He says 'TSH resistance, low T4', and suggests that it is necessary to 'sort your bowel out to settle the cyst.' The patient then says that her bowels are not good, but are 'eggy, on the verge of giardia...I almost shat myself in the bath.' RC gave her a tisane (a herbal tea) of *Lavendula officinalis* (Lavender), *Matricaria recutita* (Chamomile), *Salvia officinalis* (Sage), *Thymus vulgaris* (Thyme), *Lamium album* (White Deadnettle) and *Menyanthes trifoliata* (Bogbean). Also a tincture of *Foeniculum vulgare* (Fennel), *Angelica archangelica* (Angelica), *Salvia officinalis* (Sage) and *Trigonella foenum-graecum* (Fenugreek). RC's use of these herbs is mostly based on the French clinical practice of endobiogenics rather than English language textbooks and sources. He explained that he gave *Foeniculum vulgare* (Fennel) because it is an oestrogenic remedy to help with the thrush that also stimulates the thyroid axis; the *Angelica archangelica* (Angelica) is alpha sympatholytic to help with the transition from the vagus to the sympathetic; *Salvia officinalis* (Sage) stimulates the thyroid axis; *Thymus vulgaris* (Thyme) stimulates cortisol and is used for thrush; and *Trigonella foenum-graecum* (Fenugreek) is vagomimetic and anabolic. Thus the patient's terrain is being treated via herbs that have endocrine actions. The symptoms are not being treated directly.

This is a crucial point – if you get rid of a symptom, which the patient would quite like you to do, then you have to be careful that whether the symptom is the last gasp attempt to keep the boat afloat because if you remove that then you remove the very prop that the patient was relying on. This is where a very careful developmental history is so important. Something like migraine is an attempt to catch up because most migraines cannot operate so they lie down in a darkened room,

allowing the adaptive resources to rise so they can operate again. So if you are trying to treat a migraineidentify which of the adaptive burdens the terrain is incapable of meeting and if you can assist in that way the patient will stop having migraines...you simply switch them off at source. You certainly don't treat the migraine itself.

While endobiogenics necessitates a detailed understanding of complex hormonal pathways in order to treat the terrain, for RC this cannot be separated from knowing living plants by becoming habituated to them by simply spending time with them:

Back to the theory of cure, if the therapist has a very clear procedure, a regulatory theory, it means that the quality of your attention improves and the patient appreciates and feels that. I am not saying that you can believe anything you like and it will help, but you have to have some regulatory theory of cure, and my experience of endobiogenics is that it satisfies me in that it is culturally attuned, one is able to validate certain aspects of it – it is not all subjective, and it is relational, it is about relativity, it is not about absolute states. In all the journeys that I have made in trying to find a theory of cure in North America and at the School of Herbal Medicine I waited for recognition of something that seems appropriate to the very thing that one is trying to use - medicinal plants, and I may be very naïve but if you're in the wild and you are surrounded by plants, we eat them and take them for medicine, and the primary notion is that you have to get to know them as creatures and if you learn a system of cure without that relationship then I think life becomes very difficult to practice herbal medicine. So I would make a case for always knowing the plants you use. I have never used a plant that I haven't grown or seen in the wild...with the exception of culturally accepted plants like ginger. I am not into localism per se but to use a plant that you don't know directly I think limits your ability to find a theory of cure.

A priestly approach

RC's mother had said about him from an early age – 'he'll sit and listen'. Both RC and Dr Lapraz had narrowly missed being priests. And now RC finds that quite a lot of his patients see him as their parish priest. RC says that he found his 'path with heart' and that

when a patient is diverted from his or her path with heart that they become ill.

(Patients) need to find their path with heart and then they won't need the medicines.

So while RC has found his Theory of Cure in endobiogenics he also tries to create a space for patients to consider their problems 'like spreading out a picnic whose contents are misremembered or were made by other hands'. As well as having his 'Theory of Cure', which will reassure the patient that he is 'more than a good and sympathetic listener', there is a parallel process of witnessing the patient and allowing a consideration of the problem at hand. For RC this parallel process is the main function of both the doctor and the priest. As RC says:

In a way, one could summarize the sacerdotal agency as mediating the symbolic manifestation of a patient's problem, and contrast it with that of the "purely" medical as one that deals with technical manifestations. Of course, these problems, which seem 'merely' mechanical, will almost certainly have symbolic origins.

As an example, a lady came to see me last week. She arrived flustered and mumbling and continued to witter for some minutes. She became gradually more comfortable and relaxed from her journey and the stress of having to present herself as important. The problem of a fortnight ago surfaced and she broke into tears: as she herself said, and as everyone reassured her, it was a trivial problem [her home telephone broke]. I treated her daughter for acne many years ago, then for her and her husband's infertility. Then Robert was born four years ago to the happy couple and this little boy gives this patient her reason for living. He arrived in time to be cradled by his maternal grandfather whom I treated in the final months of his life. All of this continuity means that she does not have to explain anything to me. This is the blessing brought by relationships, and is one of the benefits of the old system of family doctor. There needs to be some parallel processing going on: I have to listen out for her medical state as I

provide her with the opportunity to interiorize in public: to display what is there for the benefit only of herself and her world.

These parallel processes - applying a Theory of Cure to select the right medicines, and the witnessing of the patient - in fact support each other:

..the quality of human attention is the usual conduit for medicine to be successfully introduced and for healing to take place.

Reflection on RC

RC's entryways suggest certain crossings, or blurring of the boundaries between the human the non-human. This can be seen in his 'being involved with plants without being involved at all', in the importance for RC of the smell and taste of herbs, and in his 'simply knowing things' without a referenced source of information. After RC had travelled a long road from England to France to North and Central America and back to England again he eventually found his Theory of Cure in Paris in the form of endobiogenics, a systems biology approach with a detailed understanding of the horizontal relationships of hormones at its centre. Like his teacher, he gave up the enchantment of the priesthood and found endobiogenics. It was attractive to RC due to its language of science that meant it was 'culturally attuned', and in its at least partial validation, as well as in its avoidance of viewing the body in terms of absolute states. RC's early experiences with herbs may be related to his selection of endobiogenics as his Theory of Cure, for both of them require crossings of sorts. The first crossing is between RC and plants, and the second is seen in endobiogenics' forensic examination of the relationship *between* hormonal axes, rather than simply following a single vertical axis, as is done in orthodox medicine.

Importantly, for RC, knowing plants, by simply 'becoming habituated to them', was necessary for his arrival at his Theory of Cure, i.e. endobiogenics. Without his childhood experiences he may never have arrived at this need. This knowing of plants may be seen as the

enchantment, or sensual-affective energy, that RC required to arrive at his destination. The other driving force being his desire to find a way to avoid having to choose from lists of apparently similar but ultimately different herbs that he was taught as a student. No more sticking pins in the British Herbal Pharmacopoeia. Furthermore, RC's priestly approach to patients, seen in his attention to the 'path with heart' can be seen as a potentially enchanting experience.

Reflection on CT and RC

Both CT and RC, despite having somewhat hidden entryways, chose to engage with science. This coheres with the journey that WHM has been seen to be taking in its integration of scientific knowledge into practice and as a strategy of increasing the likelihood of its political survival. CT, in his engagement with complexity theory, chose to work with the general principles of complex systems science. RC, in his attraction to endobiogenics, chose to engage with a specific manifestation within the field of systems biology, itself a sub-field of complex systems science. While both complexity theory and endobiogenics are 'scientific', the former can be broadly seen as 'cutting edge' and the latter can be viewed as more peripherally located within science. Neither CT or RC can be seen as engaging with elements of science that are taken for granted within the scientific community. We now turn to the three final herbalists, whose entryways are arguably even more hidden, and whose narratives reveal rather different trajectories.

AF

Entryways

AF remembers the influence of spending time in nature on his eventually becoming a herbalist:

I'd always been interested because my dad was very into natural history, when he retired, he was working, he did voluntary work on nature reserves and things. So we'd go for long walks on Sunday afternoons and look at the birds, and

he'd say what they were, and the trees, and he'd say what they were. It never ceases to amaze me how little the students at university know about just the natural history around them. And things like going, we used to go to a favourite little meadow on the Downs, which was covered and covered with butterflies. So many butterflies, you could run around and catch them, and let them go and catch them and let them go. You just don't see that any more.

AF sees a particular event as being important for his journey to being a herbalist:

When I was five, that's when the plants called me, or the spirits of the plants called me. Because we had this typical suburban garden with a lawn and a vegetable patch and a bit at the end where you had the bonfire, and the bit at the end was always very exciting because it also had the air raid shelter, which hadn't been demolished then. And that was my favourite bit, and I seem to remember, around about the age of five, sitting there, and looking around at the plants, and suddenly becoming aware that plants were all different, they weren't all just general 'plantosity'. I think babies see the world as like a, everything sort of general and then they pick out their parents, they pick out another thing, they pick out another thing, they pick out things about their house and then they start to pick out things about the world. Anyway, the plant I became aware of was Red Dead Nettle, I didn't know what it was called or anything, but I became aware of it as a separate entity with a separate spirit, and that's my earliest memory and I think that's when the spirits of the plants called me.

While CT and RC had entryways such as 'naturphilia', a critical religious sensibility, the importance of the smell and taste of herbs and 'simply knowing things', that hinted at crossings between the human and the non-human, AF's early experience with Red Dead Nettle suggests a more active role on the part of the plant in relationship to the eventual herbalist that AF would become.

Three Theories of Cure

AF studied for a degree in Physics and was a science teacher before he enrolled at the School of Herbal Medicine, graduating in 1983.

He also apprenticed with an older herbalist:

I used to do that two days a week. And then she'd have, she'd call me in if they were interesting patients who didn't mind. And I'd sit and chat to the patients, I learned a lot that way. It was a proper apprenticeship thing, in a way, because I had to prune her garden as well. I remember pruning a climbing rose, it took me a whole day to prune this massive climbing rose, got cut, really prickly things, climbing roses. I got covered in cuts. I remember cutting back the hawthorn, not the hawthorn, it was a rosemary, she had big rosemary bushes and she had ... and a motherwort and all sorts of things growing there.....So that was good, so then after I qualified I could always call on her.

When he qualified he set up practice from home:

And we came over here and set up this room, which is the front room, as a dispensary. And we built all those shelves out of skips, you used to find really jolly good stuff in the skips in those days, it's mostly rubbish these days...

AF knows RC, who found his Theory of Cure in endobiogenics.

What is my Theory of Cure?.....I thought well, you know I don't actually have one. I have several. And I apply them according to the circumstances basically.

1st Theory of Cure - Working with Physiology

When AF was training there was still a residual Physiomedical influence on the curricula, with modules on Physiomedical theory and dispensing, which retained an emphasis on physiology.

Pathology. I always try and ignore pathology, and work on physiology. And one of the best examples I had of that, was a patient.....she had lupus, quite mild. And it mostly manifests on the skin but definitely also going inside, because her energy was very low, and I just, I started off, because I'd treated it before, just treating what it said in the books, that you use for lupus, didn't get anywhere at all, and then thought, well

let's use strong anti inflammatories, and didn't get anywhere at all. And then I went back to the physiology book and it said lupus is basically a connective tissue disease, and connective tissue diseases affect, firstly and mostly, the circulatory system, so you need to strengthen the walls of the circulatory system, which is hawthorn and bilberry. I made her a tea, because she didn't take tinctures, hawthorn and bilberry in it and a few other things, and that was when we started to get results, that's by going back and looking at the physiology and what was really going wrong. So, part of my thing is physiology as orthodox Western physiology and the other herbs work with that. And I think there's still, I think quite a lot of herbalists work that way. It's a good way of working.

2nd Theory of Cure – Emotional causes of illness

While the first Theory of Cure is very much located at the physical level of tissues and organs, his second Theory of Cure looks to the role of emotions.

And, when we first started.....we went and did the Co-Counselling Network introduction course, that's all you need really, unless people are really bad, and basically just sit, shut up and listen. And listen, and then, listen to what people are really saying, andjust feeds back a way of approaching people, which is incredibly important. It doesn't matter how clever you are, or how much you know what people need, they're not going to do it unless you get, unless you can speak to them on their level in some way.And then you give lots of space for people to talk, so people very often say, well I don't know why I'm telling you this. Happens a lot that and some people say, I've never told anybody this before which is nice. Because, I mean, really people know the answer to their own problems, if you can just tease it, pull it out of them. Just tease it out of them. So I was treating someone the other day and she has depression and I used Black Cohosh because she used the word black and the word black just sprang out at me, bang and then there's the old traditional thing about black moods and I very rarely use black cohosh for depression. Also there is, she had spinal issues. So I think, probably having used all the things that was normally tried and none, and nothing actually worked, I have great hope and great faith in,

great hope in the Black Cohosh. Because then it's about fitting a herb to the person isn't it? So that means you need to get to know the person as well as you possibly can, as well as you know the herbs. So you have to be thorough and you have to do the case history thing because people will forget or they'll de-emphasize things, which actually turn out to be quite important.

AF sees part of his role as helping patients to find the freedom to play with being something else.

I need to be something else in order to be able to tell them to be something else. This is perfectly true.

Then the other thing, the other way I look at it is you reach a place with somebody in the consultation and then quite often they'll go out feeling really happy and say I feel really happy and good and relaxed and content. You know it's not going to last because they're going back into the world, so in a way you give the bottle, it's like a distilled essence of the consultation to take with them.

While AF uses herbal medicines that have restorative, relaxing or stimulating effects on the nervous system, he also uses flower remedies to treat emotional issues. Flower remedies are mostly made by leaving freshly picked flowers in spring water in the sunshine for several hours before straining, adding a preservative, often brandy, and bottling. AF's flower remedies have either been made by himself, other herbalists or friends, or have been bought. AF uses a striped brown and amber pendulum, made from recycled coca cola bottles, to douse for the flower remedy that is most helpful for the patient. The remedies are kept in homemade boxes that have collaged and varnished images of natural landscapes, including plants, a mouse, butterflies, a dousing stick, and horses that seem to be hiding.

.....it's a very useful way, I use it mostly integral with counselling, so you do the flower remedy, if a flower comes up, then you discuss what that flower remedy means to people, then they say, oh right. I have at the moment, I had a

patient off and on, she's a psychotherapist.....And she sends me her patients just to do flower remedies mostly.....because then we can feed back to her, what flower remedies come up, and it's ever so interesting. And another patient I've seen for years and years and years that way, and they would come in, you'd do the flower remedy, before they said anything, and they'd say, that's the issue I've been discussing this week with my therapist, just like that, that's what I need to work through. And then you do the remedy and it helps you to, facilitate that process. So that's really nice, I love working with her, that's nice.....

Some of the flower remedies address understandings of human development:

.....working through the stages of life. And that's a very interesting discussion, when they come out, and you can say things like, what happened to you when you were 14, and they say, horrible, nasty things happened when my dad left home, or whatever, and you say, well, your development is being stuck then. And you need to go back again and be 14 again, you didn't do it the first time, and I see the effect quite a lot actually, you see it with people in their 40s and 50s whatever, being divorced and they're going out again and having a proper teenage thing and they start behaving outrageously. And, yeah good, that's what you're meant to do.

AF uses his pendulum to select a flower remedy in an observed consultation. His patient, John, previously had prostate cancer but has been told by his doctors that he is cancer-free. He also has a history of IBS. Mostly it is anxiety that John is seeking help for. He says 'this health anxiety is terrible, it seems to have worsened the healthier I have got, these crashes, normally in the morning, it well kicks in, and velcroed to it is anxiety...we talked about adrenal exhaustion..... health anxiety – for example this (skin condition) can turn into kidney failure in a second.... Crashes and anxiety are more extreme but my system is stronger.....but it is such a battle with anxiety. I'd love to get on top of that a bit more. I'll get light headed.'

It is a wide-ranging consultation that includes an abdominal examination and urinalysis, both of which reveal nothing abnormal. AF tells John that he's going to find a flower remedy for him. He gives the flower remedy boxes, one at a time, to John. AF holds the pendulum over the box in John's hands. The pendulum moves from side to side over each box. AF then stands up and says 'better get the reserves out then', so he gets one more box off the shelf. This time the pendulum moves in a circle over this box. He then tests all the remedies in this box individually until he finds the only one that results in the circular movement of the pendulum. AF picks up the remedy and says 'Bay flower - for bringing your dreams into reality. Does that make any sense to you?'

John replies that in a way he already has lots of work. AF says that maybe it's about keeping that up, "like the Physicians of Myddfai say 'proper diet, proper exercise and the esteem of your fellows'.....I think that'll do it. Can we do that for a month?"

He also gives John a bottle of Borage and Skullcap tincture, and suggests chromium for blood sugar balance.

John is concerned that 'I drive myself, give myself a really hard time'. AF finishes up by saying that 'my thought is that you should be a bit more dreamy in life, do you know any dreamy people, that swan through life? See if you can pick up some tips from them? So probably this bay flower remedy is to help that.'

John confesses that he fantasizes that everyone else's life is easier.

AF replies that 'that's usually from childhood, that's simple'.

AF gives him the flower remedy, which he has put into a labeled bottle for John, saying, 'it is a bit of a mystery, this remedy, so it'll be interesting to see what happens.' Four drops four times daily.

John gets up to leave and AF says 'give me a ring if anything worries you and I'll tell you to stop worrying.'

3rd Theory of Cure - Constitutional Medicine and Energetics

While the first and second Theories of Cure address the levels of physiology and emotions, the third Theory of Cure looks to more traditional understandings: namely, constitutional and energetic

approaches. This learning was stimulated partly from conversations with Chinese Medicine practitioners. However he was particularly drawn to the work of 17th century English herbalist Nicholas Culpeper, which nudged him on to further research:

....because Culpeper is very difficult to read in that term, you always, Culpeper is famously choleric melancholic – fire, earth and heat. He would write, he'd write so far and he says, if you can't work out the rest for yourself, then I can't be bothered with you. So you have to work it all out for yourself.

This search led AF to travel to the Wellcome Library in London. He read Anglo-Saxon medical writings, the Victorian herbalist John Skelton's work, also Parkinson, Gerard and always Culpeper who he found intensely practical.

They had, well one interesting book they had was called, Medieval Science Sourcebook. It was basically just little snippets, but one of the snippets was on medicine and the, it was actual medieval stuff. So, that they just translate the documents for that and there was, the medicine one was a case study of someone who'd done a Galenic analysis of their patient, earth, air, fire, water, they were, earth three, air four, five, two, one and then they'd made out the prescription almost like, an algorithm, they'd done earth air fire water on the prescription, I thought, that's very, struck me as being reductionist, but that was quite inspiring.

AF was drawn to Galenic constitutional humoral medicine, which dominated European medicine from the 2nd Century to the 17th Century AD. It divided people into various combinations of choleric, melancholic, sanguine and phlegmatic 'humours'. Each of these humours is associated with an element – respectively, fire, earth, air and water; and with qualities, respectively, of hot and dry, cold and dry; warm and moist; and cold and moist. Thus people were categorized as certain types. If a certain humour is dominant in a particular person they tend to favour that humour which become excessive and needs rebalancing, which can partly be done by using herbs with qualities that oppose the dominant humour – treatment by 'antipathy'. In particular he found that this

approach helped him identify ways of relating to patients of different constitutions:

.....you know that sanguine people require a nice firm, authoritative hand, so you be as firm and authoritative. One of my problems is that, I suppose because I'm quite sanguine, is I tend to pick up from people, and I find if I get a completely scatty person coming in, I start to get scatty, so then I have to be quite strict about that. I've always found phlegmatic people the most difficult, which might be because phlegmatic people hide their emotion anyway, but it might just be because I have very little water, I don't know...

He now sees this categorization into different constitutions as being too rigid:

..you can't put people in boxes anyway, they don't fit in boxes, they've got arms and legs that stick out.....in itself it's not that useful, it really isn't. It's much more useful to try and get a lower level, lower level, it's what we always try and do, get down to the real meaning of life.....

AF prefers to use 'energetics' now. He says:

We all learn that plants have actions but that's just bollocks really.....Herbs have interactions, they interact with a person, which is why different people respond to different herbs – that is the use of energetics – to find the herb to fit the person.....
When we study energetics we are not studying actions or constituents but we are studying the herb itself.

For AF, there are three main ways of studying the energetics of herbs, i.e. the herbs themselves:

Firstly, there are conversations with plants.

I did an exercise a few years ago....we had a patch in clinic between patients and I took them (students) outside, and growing outside is a plant that I thought no one would recognize..... That is Canadian Fleabane.....They didn't know it all. So we found the Canadian Fleabane and I said everyone go up to Canadian Fleabane and introduce yourself, out loud, this is extremely important when talking to plants. You must talk out loud. Talking inside your head

is how humans delude themselves consistently all the time. They think that because they think something inside their head that it has been done. It hasn't.....Anyway they did. They were quite brave. They talked out loud. You introduce yourself and you ask it a little bit of information on how it is in the world, its virtues. And there were half a dozen students there, and every single one, so we looked it up in the books to see what we could find. And every single thing in the books had been found by one or other of the students. And nobody had got anything wrong. On Canadian Fleabane. And those were people on a BSc degree who were presumably quite logical and scientific. A lot of people say 'oh, I dunno, I can't do this intuitive stuff'. You can, it's dead easy. All you do is go out and talk to the plants. You must talk. You must talk out loud.

Secondly, there is learning from texts over time.

Pick a plant and read it up in all the old books you can possibly find. It's a thread...the plant has interactions with humanity throughout its history and if you can follow the thread all the way through from the old shamanic stuff all the way up to modern science including constituent pharmacology, after all even the constituents are made of the spirit, aren't they? And the modern uses, you can see the whole picture.

Thirdly, there is learning from tasting herbs.

Tasting will help you resolve tricky points on energetics. Too many people think that energetics is about reading lists of things, so many hot and cold....that is rubbish....it is about directly relating to the plant....you can't learn energetics from books, you can't learn about hot and cold and constitution from books....you can only learn about it by doing it and if you get involved in a dispute it is easily solved by tasting....we were doing a tasting ...an Indian lady trained in Ayurvedic medicine said *Datura* was a warming herb.....I thought that was strangenot a warming herb because it kills you basically....so we tasted it....it brings the heat in....it warms the centre.....so in that sense it is a warming herb.....but the periphery gets cold

AF has developed a method of tea tasting that is usually done in groups. First of all a tea is made with a single herb, although not too strong as one constituent may dominate. No one is told the name of the herb.

Try and approach it without any preconceptions, very hard as a herbalist, start by smelling it, do not drink it yet, I do think that, after sitting with herbs, tasting is the best way of approaching the energetics of herbs. Herbs do not have actions, they have interactions....will interact with each of you differently so do not be embarrassed..... If you want you can call it organoleptic testing, because you are using all your senses, toes and everything.

In AF's method, first of all the smell is assessed - what does it smell like and how does it make you feel? General impressions are noted and medical language is avoided. Then the tea is tasted, sipped slowly, swished around the mouth, the texture is noted as well. What impressions does the taste give? A free approach to the language used is encouraged. Is the taste bitter, sweet, sour, salty, pungent, dry, smooth or oily? Next we get to the 'appropriations' i.e. those parts of the body - tissues, organs and body areas where its activity is felt. What does it do there? Does it move outward, inwards, down or up? How does it move? Does it move slowly, expansively or lightly? Is it warming or cooling? Lastly, tasters are asked to finish the sentence 'it is like.....' and to be free with their language. During this process AF draws a figure of a person and notes the answers down and highlights body areas as they are given out. In the end there is an annotated image that describes what has been found. Then the name of the herb is revealed and its qualities and medicinal uses are discussed and compared with what the group had found in the tasting.

These three Theories of Cure are not used discretely. Rather AF draws on different elements as required. The ease of integration of these approaches can be seen when AF is talking about herbs. For example, when talking about Lady's Mantle he approaches it as a tissue herb for the womb. However he also asked a patient every morning in May to

gather the drops that it secretes as part of a wider emotional strategy for her. And when talking about Sage he uses energetic terms:

When you've tasted it I hope anyway you've felt the way it draws into the centre, it draws the vitality, the vital heat, the energy of life into the centre of the body, holds it there. Very good for scattered states, I use it a lot for after infections when everything has scattered and needs to be brought back to the centre again. Also of course for hot flushes, which is a scattered state, whether due to the menopause or fevers, low grade viral infections...

But just as easily he describes using it for prolactin-secreting tumours of the pituitary gland:

I've also used it, three times, in fact four times, for prolactin secreting tumours of the pit gland. Use tincture of equal parts thuja and sage, back that up with a couple of cups of sage tea just to really get the sage in there. Just to bring the prolactin levels down, works very very well. I had three women there out of the four get pregnant, which of course is the main reason why women come to see me with prolactin secreting tumours. One woman actually had two babies each time with the sage, doing it, bringing the prolactin down again. It's a reasonable strategy, the orthodox strategy with prolactin secreting tumours is to give the drug for a couple of year and cross your fingers, because very often the whole thing will just go away and you don't have to the operation, which is very tricky, so doing the same thing with sage and thuja is a reasonable strategy. Just measure the prolactin levels, see how you're going, and see if your having success.

Spirit and a sense of place

For AF it is only through his own spiritual development that he can help his patients:

That is what it's all about. It's about plants and relating to the plants, and the way that plants help you relate to the spirit, and so the whole thing is about..... the whole thing is not about patients, it's not about getting people better, it's not about being a healer, it's about you, and your spiritual development, that's

what it's about. Because then, the more you can do that, then the more useful you are to people...

And it is through knowing his local plants that his spiritual development progresses:

What is the first responsibility of the herbalist?.....to my mind the first responsibility of the herbalist is to the earth....because that is where the plants grow....we look after our patch, it is looking after your patch that gets you in touch with the herbs and the earth and the energy of the earth in that place and no matter how many exotic herbs you may or may not use it is extremely important to understand the herbs growing in your area. Keep that conversation up so that you can keep up the conversation with the earth so you can know your sense of place. That is the spiritual dimension of herbal medicine. I regard herbal medicine as a spiritual path because the herbs relate directly to the spirit and help us to relate to the spirit.....

AF knows his local area very well. He knows where to get which herbs at what time of year. He often leads herb walks for students and other herbalists. If you are late for a herb walk with AF there is no need to worry as they won't have gone far. The walk is less than a stroll, more of a shuffle, with lots of pauses. On one walk, inching slowly like a shadow on a sundial he shares his knowledge about cherry laurel, ginkgo, barberry, pignuts, creeping thistles, nettle, dock, pineapple weed, plantain, hawthorn, elder, hedge mustard, herb bennett and enchanter's nightshade.

I think the most important thing is about using local plants, you need to use as many local plants as you can, in order to build up your relationship, because you can only build up a strong relationship with the plants that are around you..... I start building that up, and understanding it energetically, and its friends and relations, it's in that family that does, and it has that and so on. But I can't get as deep a relationship as I can with the stuff growing on my windowsill.

And that's very important, and that, because in the end, even if it's just a handful of plants, my relationship with those plants is

the key to me, and it's about building my own energy with the plants and my own relationship with the spirits through the plants which is about evolving me, so I think localism is incredibly important, for the herbalists themselves, maybe not quite so important for their patients, although the herbalists themselves, is important to the healing process.

This localism also extends to his patients. In one particular case AF treats a patient's 'out of place'-ness with herbs and her condition improves:

A woman, 35 years old, a student for her sins, very irregular cycle, no period for 10 months, a bit on the chubby side, so you could think PCOS (Polycystic Ovary Syndrome)...prone to headaches especially migraines. She originally came because of tachycardia on exertion, nausea, heaviness to her digestion, very tired, all her life prone to depression, unsatisfactory relationship, not happy in London, father left home early, sluggish digestion, aches and pains. Migraine strategy of feverfew, betony, dandelion root and leaf.....This strategy worked well, in two months she was better, digestion improved, heart settled, energy increased.

But no change in her cycle. I tried, I am afraid to say, the standard PCOS remedy – *Vitex*, Liquorice, *Paeonia*, didn't work at all. Then we were talking about how she felt out of place (in a big city), she was brought up on the chalk Downs....so I made up a medicine from my dispensary from all the medicines that grow on chalk...a little bit of each....Vervain, St John's Wort, Pulsatilla, Wild Carrot, Bryony, Hemp agrimony, Sanicle, Cramp bark, Clematis. 5ml a day. Her periods started in one month. I didn't want her to take 5ml 3 times a day – she might think it was a medicine. I wanted it to be a special thing – 'take a little hit of this'..... We used this medicine for her, over 3 to 4 months her periods became nicely established, but the flow was erratic so I added some ladies mantle tea....

AF loves to harvest herbs. He sees it as helping to learn about herbs and connecting him with the ancestors.

And the hands speak directly to the heart. This is why doing things with your hands is so important.....Yes, I

think your body learns doesn't it when you're picking because everything has to be picked slightly differently. Well I don't know if I could put that into words, but the body learns about the plant when you're picking things.

It feels wonderful. Probably harvesting is the most important thing, that's why if I do a workshop I have as many people harvest, it is just half an hour and to me that connects you with the ancestors.....I remember distinctly a few years ago picking, what was I picking, elderberries I think with a friend of mine..... and suddenly becoming aware of all the ancestors picking with you. So that's ancestral memory, tapping into that which is incredibly important, because we're distracted from that. So picking I think is invoking ancestral memory. I remember, another time it happened, not with picking, (at a summer school) they'd camp in the woods.....and taking the camp down, I got this really strong ancestral memory, this is what people did, they took the camp down and they collect it all up and you could feel it, it was brilliant and in traditional society it's very important to keep that contact with the ancestors, otherwise you don't know who you are, you don't know.

Reflection on AF

AF's entryways of spending time in nature and being called by Red Dead Nettle are beginnings that resonate throughout his narrative. Spending time in local nature has been important for AF in his professional life, from pruning a climbing rose as an apprentice, to knowing his patch, harvesting his herbal medicines and in prescribing herbs local to where a patient used to live. And being called by Red Dead Nettle, as a human-nonhuman crossing, where boundaries between subject and object are blurred, is a crossing that provided enchantment, a sensual affective energy that can be seen as allowing other lines to be crossed and other journeys to be made. For AF, talking to plants and the sensual tasting of plants became ways of knowing plants 'energetically' as medicines. Attention is given to the most 'basic' level in order to help patients. AF has come to prefer energetics (knowing directly) rather than constitutional medicine (knowing by categorization). Rather than treating disease he supports physiology (physiology comes before pathology), enabling a patient's lupus pathology to be addressed. And treating

emotions (as causes of illness) with flower remedies is necessary when treating the body. And ultimately the only way to help patients is to acknowledge that 'herbal medicine is about you' (the herbalist).

So a paring back to the most 'basic' levels is always required, arguably in a similarly 'arborescent' way that was described in the case of SB. This paring back and this closeness to plants reflect and reinforce each other. While having learnt his relatively traditional approach to herbal medicine over many years he still resources science, particularly physiology, and draws easily from his different sources as needed. The crossing of AF with plants allows his knowledge sources to sit easily together.

BC

Entryways:

BC sees her route to being a herbalist as having started when she was very young, while 'still in nappies':

Every herbalist I've ever spoken to has a plant that called them. Their first experience of the plant world was something that was very emotive and significant. And, of course, as soon as someone's asked that question you want it to be the yew tree or the mandrake or, and it's always something very humble. So at the time I wasn't aware of these things happening but with hindsight I can see a very clear trajectory so the very first thing that happened was that the plant that called me was grass. And I was, I was still in nappies. There's actually a photograph of me on that day and I crawled away from my parents in long grass and was surrounded on all sides by grass taller than I was so I couldn't see out. And the whole of the rest of the world fell away and I was in this still, beautiful complete world. And I remember really clearly feeling safe and a sense of wonder at this grass all around me. And then was either come to be, was fetched or found my way out or called for help or whatever, but I remember so clearly the long summer grass and the short fresh green underneath it. And I remember looking around on all sides and being inside this wonderful space. And then when I was older, about five I guess, I was riding my bicycle up and down

the street and noticed grass growing through the paving stones. And again this sense of absolute wonder that these delicate small leaves had managed to push up. And I suddenly had this unfolding idea in my head of how nature is just behind the façade of the city and how easily it can push through. And I remember again this sense of enormity that came with it so that was my, if you like, the calling.'

Her mother called her a 'nature girl'.

Why I chose herbs rather than any other form of medicine? My mum always used to say I was a nature girl. I've always felt very comfortable in nature, saw fairies for the first time when I was 13 and in the woods. So and there's a picture of me. I'll show it to you. There's a photograph of me standing inside a tree. I think that she looks very comfortable there - that girl standing in the tree.

.....So I've always had a comfortable experience in nature, standing on the edges of cliffs, climbing up and down rocks, knowing my way up and down a tree, not being frightened to turn a rock over and find the creepy crawlies underneath and plants, always plants, so yeah.....

As a young child BC had extended stays in hospital for repeated investigations.

I learnt to dissociate because as a child in those days they didn't believe that the nervous system or the emotional system of a child was fully developed so they wouldn't put you under completely and through an anaesthetic and so on and so forth. And also they never asked my permission to do these investigative, really invasive investigative diagnostic tests. And putting me in front of a classroom of students and saying this is the subject. I'm like what? And actually having to say to them while they wheeled me down the corridor, am I having an operation? And then them saying, oh isn't she clever?..... So I, my, one of the results of that was I was like, oh my body doesn't belong to me. It belongs to these people here who remove parts of it and put you in a different bed than I was yesterday so my father can't find me when he comes into the ward. And my body doesn't belong to me. It belongs to these people to do with as they choose. So I learned to dissociate.....So it's possible that on some level I was taking

care of my body. I don't know, anyway. But all of these things feed, the wounded healer and all of that, all of these things feed into it.....

BC's illness experience led her to choose to avoid orthodox medicine, preferring to learn to treat herself:

Our own illness is also a teacher.Although it's a very powerful gene in my family I always refused the tests. I always refused the medication. I always refused the hospital stuff.....But I was determined to find my own way through. So I started looking at diet, sugar.....

When she came to study herbal medicine at University she found that studying anatomy and physiology was 'like remembering something'. She realized that this was a continuation of formative experience all those years ago:

And within a few months I knew that I wanted to be on the herbal medicine degree course so I switched over. And as soon as I did it all fell into place and I realized that I had been on this road probably since the first time I was surrounded by grass.

Patients' stories

She sees herself as a 'wound-poker' or 'wound-finder' – someone who patients feel comfortable confiding in.

And for one reason or another I've always been one of those people, as a journalist, as a person in this house with waifs and strays coming through, I've always been one of those people that people feel able to confide in. One of my pagan friends said, God you're a wound-poker.....Really! And so I've tried to temper that down to wound-finder rather than wound-poker. But yes, I am. I can't help it. It's something that I have always been able to do. When I was younger people said, oh God, no you can, don't talk to her. How did you know that about me? Who have you been talking to? I'm like 'nobody'.

She sees her role as facilitating patients' stories:

One of the things I now say is that my job as a herbalist is to help you, the wounded storyteller. So I'm the wounded healer. You're the wounded storyteller. There's a book called *The Wounded Storyteller*. So my, everyone, in fact I've spoken to several people about this and it's fairly well recognized. Everyone arrives at this ultimately on their own because it's so obvious. What happens is that you've got a, there's like a blanket that you're weaving. You're making a picture, a tapestry of your life with all the different threads. And sometimes those threads get tangled up. There's a knot. And sometimes people carry on but there's this knot left. Sometimes they can't carry on because the knot is too large or because they feel so defeated by it. And they bring this knot into me here and my job is to say, well where, this red thread where does that end? Let's follow that back. Oh look, it's actually two red threads and it's actually helped unravel. And what I'm saying to the patient is what does this connect to? So I'm puzzled and learning, you're explaining and by explaining it you're understanding it. That's all my job is to help you unravel that knot so that you can then continue to weave the pattern, to tell the story. And the herbs helped to facilitate that process in many, many, many ways.

BC works from home. She begins observing her patients from when she opens the front door and follows them up the two flights of stairs. As well as covering the presenting complaint(s), the consultation covers the medical history, drug history, family history, lifestyle, and an enquiry into each of the body systems. After the patient has filled in an information sheet the consultation usually starts with BC asking 'So what brings you here to see me today?'

During the consultation she checks that she has understood the patient correctly:

So I will stop them throughout the consultation to say, this is what I'm receiving, is that accurate? And sometimes when they hear it come back to them, there's this huge relief in them that someone's heard them, and is not trying to qualify it or change it or put their own reading on it. And that opens the floodgates.

For BC, the medical diagnosis and 'what is the matter' with a patient are often different things:

I want to know if the doctor gave them the diagnosis, or if it's something they've self-diagnosed. I'm happy to work with someone with a self-diagnosis. Sometimes, very often people are very well informed. But we need to explore the provenance of that. Sometimes they have a diagnosis from the doctor or the GP and actually it's not what the problem is. I had someone who came to me with a skin rash. And, when we came to talk about cardiovascular health it turned out that he and his brother both had, his brother had died of it, a congenital heart problem. And the rash cleared up after the first visit. And on his second visit he didn't even mention the rash, until I reminded him. He said, oh, he'd forgotten about it. What he was now speaking to me about was this physical coldness that would come upon him in the middle of the night when he couldn't sleep. And eventually we worked together towards a diagnosis of fear of the grave. So very often what brings them in to see you is not really what's going on. And it's, the storytelling part is about allowing them to come back to the central part of that story.

BC seeks to create the right environment for the patient to be able to identify the 'truth of the matter':

.....what I'm looking for is the point at which they start to ramble. They start to look more broadly. They'll start to look around the room, not look at me. They're starting to cast their eyes down into themselves, or up, into their own imagination. And I'll just be quiet and I let them go. Because this is where the interesting core comes, right? Now there's a book that I read called, oh, it was one of those books about the consultation, the therapeutic relationship or something. And I read one thing in one of those books that really went home to me. It was, if you have the patience and the courage to let, to be still, to be silent for, it said 30 seconds, actually it's longer than that, if you have the courage to hold the silence for 30 seconds, the patient will tell you what the problem is. And I don't interrupt that moment. So what happens is they become quiet, they become still.....They're looking inward. And I'll sit and be very still and very quiet, very present, very focused, very alert, but quiet. And sometimes it can take up to a minute and a half. And I'm happy to wait, because I know that they're working in that time. And what they come back to me with after

that silence, and sometimes it can be as little as ten or twenty seconds, is the truth of the matter, the heart of the matter. And, it may not be, it may be cryptic, it may be metaphorical, it may be symbolic, it may be a substitute, but it's the truth. It's the heart of the matter.

.....So what comes back out of this silence is the heart of the matter. And I have, I always say the diagnosis is in the history. I'm sure I'm not the first person to have said that. The diagnosis is always in the history, however mysterious, or complex or confusing it might be, the patient will tell you what the diagnosis is. Now, it might not be, I've got a skin rash because my detergent is wrong. The diagnosis is going to be something else, be open. Be expanded in what that might be.....I'm not talking about the clinical diagnosis, I'm talking about what's wrong with here (indicates her heart area)? What's wrong with, what's the matter?...

.....For instance, this chap that I told you about who came to me with a skin rash and then he ended up telling me, he went into his drifty space, and I was waiting to hear what came of it, and he then told me that his brother had died in his sleep of a congenital heart problem. That was the crux of the matter for him.

However, for BC it is not her job to explain things to the patient, to put words in their mouths. In reference to the patient above she notes that:

And I was, it would have been dangerous for me to say, so what you're saying is what's really wrong here is you're frightened of dying because you're brother died in his sleep. It would have been dangerous, and unhelpful, and in fact, detrimental

She explains this danger with reference to another patient:

He came to me with bladder stuff, you know, ongoing repeating cystitis.....And he was training as a counsellor, so I, as it turned out, foolishly assumed a certain degree of emotional intelligence and literacy, without checking my assumption was correct. So, when I started asking him about his childhood history, I asked him if he'd been a bed wetter. I asked if he'd had any bladder problems as a child. It turned out that he had been a bed wetter. He had wet his pants at school, it had been traumatic and awful. He was the youngest child in a family of five. It was all, five brothers, there'd been some dysfunction in

the family home. And I said, I wonder if some of the dysfunction in the family was becoming compressed in you, and spurting out in you. He said, what do you mean? I said, well what are you pissed off about? You're expressing this in your bladder, what is it that pisses you off? And he looked at me, and he said, you are. And I said, he said, I didn't come for talking therapy, I came because I have cystitis. And he never came back to see me, and who could blame him, actually. I pushed him into a place where he wasn't willing to go. I assumed that he wanted, that he was comfortable and able to talk about.....And I made the mistake of acting on my assumption, and he never came back to see me. And I don't blame him, and I learned a great deal from him, which is don't act on your assumptions. Check your assumptions. Always check that your assumptions are true. It's not my story, it's your story. And, of course he was pissed off with me. If he's somebody that expresses his stuff by being pissed off, he's going to get pissed off. Right, I'm not helping by telling him that he's pissed off.....

BC refers to Carl Jung to understand the importance for patients of the telling of their stories:

Jung said, one of the most important lessons that he ever learned, Jung, you know the great shaman of the psyche. The modern shaman of the psyche, he talked about when he was at the Swiss clinic, doing his internship. He was just out of school. He said that the greatest mistake he made was assuming he knew his patient's story, even if he did know the story, it wasn't his story to tell. Never, ever, ever, tell the patient their own story. Ever. And that really went home for me. I'm not there to tell a story, the patient is there to tell the story. I'm there to listen to the story. And that's how the unravelling happens.

BC's stories: A bowl of water, Young maids, and nonhuman communication

As well as a desire to help patients to reveal to themselves the heart of their own stories there are BC's compellingly told stories about herbs and other things. In these stories she makes observations about people,

events, animals and plants that pass-by most people. These stories entail the blurring of boundaries.

A bowl of water: This first story refuses to separate metaphor from the patient. As a student she saw something about how a patient moves that no one else did:

.....there was this woman that came in and we were talking about her afterwards and I felt that I had a really clear understanding of what her great issue was that was manifesting this illness. And I realized that everyone else in the class was a bit puzzled by it.....the supervisor.....he was saying, well what do you think the, what do we think's going on here? And I, in the end I spoke up. And I said it's, when she came in here it was like she was carrying a very large glass bowl filled absolutely to the brim with water and she couldn't, she mustn't drop, spill a drop. And he said that's exactly what it is because that explains her gait, her caution, her sense of being distracted all the time. And I said what's in the water, what the water is is the question, whether it's something that we can help her with? Can we make the vessel larger? Can we remove some?

Young Maids: In this story BC took two 'young maids' camping, one of whom had just injured her knee. BC listened to her intuition and found a medicine that she could not justify at the time. The 'maid' improved after taking the medicines that BC prepared for her:

So August in my first year I was studying herbs, the beginning of August and I took a couple of young maids, about 15, 16 years old, camping for their first time. And one of them, the younger of the two had a terrible injury. She still wanted to come but she'd fallen and strained and twisted her knee. And she had, her knee had ballooned up. It was black and blue but, no she definitely wanted to come. So there we were sitting in the woods with this girl that could barely stand. So I said, right, well let's do some hedgerow medicine. Let's do some wild craft things. And I thought what have I got, what do I need? So, of course, I needed some comfrey and I wanted some white willow

bark. And it kept coming up in my mind, meadowsweet, and I thought, pah, why would I need a digestive herb for this child? And I kept pushing it aside and it kept coming up. And I did a little invocation, a little prayer. I said, OK, well I need to find if you don't mind, please, in this vast space I hope to find, intend to find comfrey and white willow bark. So off I went, off in a random direction and five minutes on the other side of the village I saw white willow growing by water and as I jumped over the fence I saw that there was swathes of comfrey underneath the white willow and all over the place meadowsweet. So I thought, OK, well I'm not stupid enough to turn down the meadowsweet. I'm going to, I don't know why, but since all three are here together.....

.....within hours (of using medicines made from these herbs) she was saying this feels much better and the next day she was walking and the inflammation and swelling had gone down and by the time I went home she was on the mend.

BC's attention to the circumstances and environment of where the knee injury occurred allows her to find wider meaning that she then reconnects with the herbs. The circumstances are more than incidental here:

She told me the story of the injury and what had happened was that she had, as she was coming out of school they were all talking, she and all her friends were talking about which college they were going to go to. And they were all so close and they all wanted to go to the same college. Yes, it was going to be wonderful but then she'd decided to do something different. So she had had to tell her friends in this dramatic way that children have, 15 year old girls especially, I'm not coming with you. I'm doing something else. Shock, horror, despair. She felt that she'd betrayed them all, let them all down, rejected them and as she turned away from them she, to flee, she went to run up a set of concrete stairs, tripped and fell, landed on the front of her knee. And I thought, OK, well in my Freudian, Jungian model that makes sense. She's done this terrible thing so she throws herself under a bus kind of thing.....But also she's running upstairs so she's aspirational. There's all these kind of pictures coming up in my head. There I was in the woods and I was

thinking, well comfrey and white willow bark makes absolute sense to me. Meadowsweet, meadowsweet. I understand her story as far as it's possible for one outsider to understand somebody's internal story, came home, looked up meadowsweet to find that it is, Elizabeth Brooks says that it's a wonderful ritual herb, especially useful for women, girls, females transiting from one life stage to another.

The injury is no longer a discrete event. It is not an accident anymore. Biography is blurred with the knee-joint.

She also later found out that meadowsweet had other uses that were relevant to the 'maid':

.....I didn't know at the time that meadowsweet was one of the places where aspirin was, I did not know that, I, at that point I did not know that. I subsequently learned it. So, of course, meadowsweet came up in that respect.

While BC pays attention to her intuition, and later relates it to scientific knowledge, she also questions it.

And that for me was a really clear confirmation, that whole event, that whole experience was a confirmation for me that if a herb comes into my mind pay attention. Something's tugging at me. Pay attention. It's safer to look at it, learn about it and decide it's not appropriate for this case at this time than it is to ignore it and say I'm not going to bother because if nothing else it's an opportunity for learning.

Nonhuman Communication: BC has dialogues with both animals and plants:

I once walked across a field and noticed, at some great distance, a black dog standing with its people. Something in me immediately loved the dog, and I thought "Oh, Dog!" and my heart opened to it. Even at a distance that would have necessitated loud calling to alert the humans there, too far to see the details of the dog's face, it "heard" me, or noticed me, and turned towards me and pricked up its ears and started wagging its tail. One paw up, it seemed to return my... well, greeting, and I strove to continue the dialogue. It felt very much as if the dog was saying "Oh! A human who speaks! Good! Hulloo

there!" and then when I failed to follow up on my first greeting, the dog's whole physical demeanour slumped a little, and it turned away from me and back towards its own people. It seems to be saying 'Ooh... what a pity, it only knows how to say hello, nothing else... never mind, these my own people can speak with me.'

Similarly with plants: those who have generously opted to stay connected to us, Nettle, for instance, are open and eager for dialogue. Some others, Daisy, for example, are so chatty that it doesn't seem to matter that we have been silent so long... or perhaps, with Daisy, its close association with us on lawns and in childhood has kept the channel open and active. Others, with whom perhaps in the past we had open relations but have since neglected, have given up waiting for us to respond and turned away, but are still willing to hear us readily, I'd include Yew here, I think. Yet others, like, I suspect, *Datura*, always needed to be propitiated in some way before entering into dialogue with us.

BC learns directly from plants, who always tell her to pass on her knowledge of them.

If I want to actively learn about a plant and its nature and to increase my understanding and thus my relationship with it, I would do a Journey or a meditation with that intention. Like making a date, and then being on best behaviour and being my best and highest self for the meeting. And yes, if the plant has entered that with me, and accepts me and my ways, then of course we can have a great long conversation, with clear questions and answers and sharing of stuff. I always end with thanks, and the question "What can I offer? What would you like from me? Is there anything I can do in return for the favours I have received from you?" and the answer – always and every time - is "Tell the People about us. Tell the People about us."

In a Journey to find a particular plant, Gallant Soldier (*Galinsoga* sp), BC meets Moose in some woodland (see appendix 1 for BC's full description of the Journey with Gallant Soldier). He is 'so relaxed, so chilled out. Like a confident stoned teenager.' Seeing its huge antlers she asks it 'How do you move between the trees?' Moose replies 'I get by'. On realizing that Moose *is* Gallant Soldier she later describes Gallant Soldier, as well as being relaxed and chilled out, as being

strong, confident, friendly and open. Moose's words 'I get by' have become a kind of mantra for BC.

However tricky or challenging things seem to be, if I remain relaxed and gracious and unfazed, I'll find a way through: or more than that, the way through will become clear and open.

A local knowledge-holder

BC's stories reveal understandings that others do not speak of – of patients, events, plants and animals. This world-view is hidden in modernity. Its unacknowledged nature is highlighted by another story that BC tells about a visit to SOAS (School of Oriental and African Studies) by some indigenous shamanic healers from South America. They had been asked to speak at SOAS.

And they were giving this seminar at SOAS and it was filmed and afterwards somebody said, well what would you like? And they were like saying, God somebody's finally asked us this. We know about Pachamama. We know what we know. What we really would like to learn is what you guys know? How do you people interact with your land? How, what is your understanding with, about Pachamama, the goddess, the mother? And this is SOAS, right, school of anthropology. Yes. And they were like, oh my goodness, we don't know anything about our indigenous local culture in terms of what you're talking about. Can you imagine?

Someone in the audience told them about some pagans who live at a stone circle. So 14 tribal elders went to stay with them and they shared each other's rituals. This started a relationship between South American shamans and British pagans, who invited BC to talk to a 96 year-old shaman.

So there've been seminars, meetings, all sorts of things and one of the things that happened was that I was starting to be invited as the herbalist to talk to these *vegetales* from South America, these people who have inherited their knowledge and wisdom through generations of teachers. And they're

coming to ask me about British plants? It's quite extraordinary.

She told the shaman a story about a British plant. This was important to her because knowledge of British plants had not travelled in this direction before:

.....So there was one night when I was invited to tell the story of Persephone and the underworld and Achilles and the yarrow (*Achillea*). And as I started to tell the story it was being translated for a 96 year old healer of his tribe. And every so often he'd check a detail.....I noticed, I said afterwards I'd noticed that you were not ever saying the word Achilles. And he said, well no I was telling this story about one of our local warriors who's very similar to Achilles. It seemed pointless to introduce a whole new character when we have one that's very, very similar and would behave in these ways. And (the healer) would check every so often, have I got this right? And at the end of the story I turned round to the room, almost everyone else had left the room so there was just me and the elder sitting there with the translator. And it had become quite an intense working between us. Anyway he said could you show, could I show him the plants? Gladly. We tried it together and he said did I think it would, did I think it might grow in the forest? And I said, well it could. It's worth a try. I don't know how humid it is but we talked about that. And he said we do have a plant that heals wounds in the way that you're talking about but this sounds like it could be really, really useful for our people. And the translator said he's going to tell this story when we go back. And I said, oh that's great. And it wasn't until I was away from there and back here..... I thought, bloody hell, I've facilitated the movement of Achilles to South America. I've told the story of Achilles and he's going to go home and tell his people about this, I have changed the myth cycle of his people by telling this story about a hero in my own myth cycle. That seemed really profound to me. That seemed really profound to me. He in the end didn't take the plant back to South America with him but he took the story back. And for me it was this massive validation because at no point did he say do you really know what you're talking about or how can I trust what you're saying? He treated me as the tribal herbalist. And here I was sharing information, talking

the same language, I'm not talking about chemistry or anything but we were talking about plants in exactly the same way, exactly the same way.

Local medicine

While SOAS stumbled over the possibility of UK indigenous knowledge, the shamans were at ease with BC. Similarly BC's medicines may be particularly indigenous, very place-specific. After graduating BC didn't have the money to set up a dispensary of herbal tinctures. But she did have access to 300 dried herbs at a local health food shop. However, she knew that patient compliance with continually making herbal teas is often poor. Rather than prescribing teas or decoctions to be made up by the patients, as is the standard approach that is taught, she remembered a herbalist saying that a 'well made decoction' will keep for a long time. So she developed her own method of making a low dose concentrated decoction for her patients:

How do I make a well-made decoction? So I thought, well it's about concentration. So if I assume that someone's going to take three to five cups of tea a day how do I make that cup a teaspoon? So that was my thinking and I thought, well I'll just start. Process is a good teacher. So the first thing that I, I started doing it with actual real patients. So I made the prescription and I was, I worked it out. I was like, OK, one teaspoon to a cup, three cups a day. I want a month's worth of medicine so I scaled it all up and I ended up with this enormous mound of herbs. And I thought, God how am I going to process this? And as somebody who is quite willing to trust my intuition and go with it and see what the outcome is it suddenly occurred to me that I didn't need to use three and a half ounces of, why not just use an ounce of? So I simplified all the recipes down to one ounce of whatever herb it was that I wanted, double it up if there was something mechanical that I wanted like the mucilage or the astringent or whatever. Halve it if all I wanted was the energy, yeah but the material stuff wasn't necessary or it was a really poky plant and see how I go. So I could at least fit it in the pot. And I

thought, well it doesn't, is there a better way than doing it on the top of the stove? Well, what's wrong with inside the stove? That way it gets heat from all sides. I can walk away. I don't have to watch it. The top won't rattle. I can leave it in overnight. So then I got a very large pot with a tight fitting lid so its each step was dictating the next step kind of thing. So I got a big stainless steel pot with a tight fitting lid and I put it in the oven overnight. And I thought, well if I'm going to decoct it for an hour or two is there any harm in leaving it overnight? Well, it was becoming really like a food, like a stock. But I also noticed because one of my concerns was that if it's just in water what's going to happen to the oils? But I noticed that cooking it for that long breaks down the structure to such an extent that the oils would come out. So I was ending up with really slicky stuff on top. And then I thought, oh what about the volatiles? It's all, it's well and good to have it inside a closed, but what happens because of course I've now got like, I've strained it and now got eight litres or ten litres of brown liquid. So I want to reduce that. So I put the heat under it very low just to let the top smoke. I'm not boiling it. So what about the volatiles? I'm obviously going to be losing the volatiles.....But of course it wouldn't be necessary in every case. If the volatiles are something that you want to retain then that would be theoretically one way of doing it. But you don't necessarily want the volatiles in every particular case. The other thing was I realized that once you get it down to 500mils, a month's worth of medicine I could actually play around at that level. I can take it down to 200mils and put cold spring water in if someone's hot because of course what I'm doing is I'm creating a lot of heat. So do I want to put that heat into the body? Possibly not. So reduce it down further, top it up with cool spring water so you're putting some coolness back in or I might want to put an aromatic water in or indeed a tincture. So you can take it down to below 500 and top it back up with some kind of medicine.....The other thing was that by reducing it that much to that kind of concentration I was removing so much water that it was making it quite difficult for any bacteria to really get a hold. The concentration of compounds in there to the water is not in a bacterial, a bacteria's favour. It is there. And also because it's heat treated, even if it's not at a boiling level, it is heat treated for a really long time. So that is also going

to be preservative. I've got decoctions over there that are years and years old and I still use them for teaching. And they're still good. They're still efficacious. It's extraordinary.

We now come to what makes this medicine possibly a very local medicine:

Somebody phoned me up and said it smells funny. And I said, well pour it away. And then afterwards I thought, damn, I should have just asked them to bring it back to me. Well, what do you mean funny? And then not long after that somebody else said my medicine seems odd. And I said, well can you describe it for me and can you bring it back to, for me? And it had fermented. So I did some research because I thought, well I don't, I'm not sure that this is necessarily a bad thing. And, of course, fermentation is a very healthy thing that we do to food. Sauerkraut, kimchi, yoghurt, beer, we rely on fermentation. And there's quite a lot of good evidence that shows that in order to keep the endogenous bacteria healthy and in balance with the environment it may, it's a good idea to have fermented food that has been fermented in the present, in the place, in the locale. Right. So there's an interaction where do we end and our, and the rest of the world begins? Well, it turns out it doesn't because our, if we're in a good state of health and living in a healthy environment our endogenous bacteria will, to some extent, reflect the exogenous bacteria and micro-organisms, not just bacteria of course. So I thought, well maybe it's not necessarily a bad thing that this stuff has fermented. And of course there's practical stuff like the bottle exploding and the flavour changes, the viscosity changes, the sweetness has gone, it becomes much more sour, becomes much more watery because the sugars have been eaten by the, you. But if the patient is agreeable to it I say go, I give them the option, I'll make you a new one but these are the reasons why you might want to continue taking the medicine. And they all do actually. They all say, oh yeah, that sounds great. I'll continue taking it. And what I've found is that I've had some really profound deep healings following, I'm not saying because of, following on from using fermented medicines including somebody who's an

HIV positive man who's viral load went down to undetectable. And I had a cancer patient who went into, apparently spontaneous remission after using the fermented medicines.

BC makes her medicines from scratch for all her patients and her house is filled with the smell of the medicine being cooked. The earthy soup-like smell is everywhere. The above suggests that her decoctions, particularly those that have fermented, may be very specific medicines, specific to the microorganisms in the environment where the fermentation took place. This may have started in her kitchen, under which runs a river. But it may also be specific to the patient's home, where they are continually opening and closing the bottle. These medicines are potentially very 'local', if not 'indigenous'.

Reflection on BC

BC describes being 'surrounded' by grass when talking about her entryway of being called by grass and now she has developed a method of medicine making that means that she is surrounded by the smell of the medicine being made overnight and during the day.

The sensual enchantment of those early experiences may have somehow motivated her to engage with the process of making a new type of medicine that requires her to be in such close and continuous contact with the herbs. Breathing them in, even as she sleeps. While AF's narrative reveals the importance of the sensuality of taste as a method of understanding herbal medicines, BC's proximity to herbs via the aroma of her decoctions is another way of knowing and being with herbs.

Also, the sense of safety that she describes in being surrounded by grass, and the sense of comfort in nature as 'nature girl', can be seen to be present in the way that she crafts the consultation such that patients feel able to open up and reveal the 'heart of the matter'.

And BC's own illness experience as a young girl, her subsequent questioning of orthodox medicine and the development of a self-help

approach to her own health can be seen to be present in the importance that she attaches to patients learning about themselves by telling their own stories.

The human-nonhuman crossing of being called by grass can, most obviously, be seen in her later communications with dog and with plants such as Gallant Soldier. However, the crossing of boundaries can also be seen in BC's refusal to separate metaphor from the patient. It is also present in the case of the young maid, where BC uses intuition - an immediate crossing between feeling and knowledge - to include meadowsweet in the maid's medicine, and in her attention to the meaning of circumstances in order to understand the maid's 'accident'. Also, in facilitating the journey of the story of Achilles and the story of the plant *Achillea*, if not the plant itself, to South America, BC challenges the boundary between 'indigenous' and western knowledge.

KA

Entryways

KA sees her great aunt as having been an influence on her eventually becoming a herbalist:

'(she) sorted out the local community....and she always had something for everything. Whether it was a crate of Guinness under the bed for iron, or whether it was some plants, or some concoction she'd made up. I thought that was interesting'.

KA had an illness experience with bronchitis in her 20's that led her to taking herbs:

.....and I got sicker and sicker.....Kept going back to the doctors, kept giving me antibiotics, as they do. And then someone said, oh, you should go and see a herbalist. And I thought, oh, what's a herbalist.....And this guy ran a health food store.....So I went to see him, and said, well, take all these herbs, and he, that's when the herbs were in jars on the shelves. So I got herbal teas, and some tinctures and things

like that. Went home, took them and within about two to three weeks, it had gone. And I had been off work for the best part of two months with this chest, that had just got worse and worse, so I thought, hey, this, there's something in this, natural, it's really good, this natural stuff. So I wanted to find out more.....

While these two entryways are visible, there is a third, more hidden avenue that KA found in her journey to becoming a herbalist. Looking back at her childhood, KA remembers trees communicating with her:

And sometimes, because when trees started talking to me when I was a kid, and I used to think, right, great. And then they stopped for a while, and then they started again, a bit later on, and the ones that were the noisiest were the yew trees, and I'd be out, like we'd be out with a group of people looking round a stately home or one of these graveyard places, and you're sitting there eating your packed lunch, and all of a sudden this voice goes, hello, and you're like, you come to realize after a while that the tree is talking to you. And you're like, OK, I'm going to sit here quietly because people will think I'm mad, but this tree is talking to me, and you lean against it and then it went, you must take some of my leaves and little bits here and you must burn them, do a little ritual and burn them. I said why, well, we're all about death and rebirth, and some things you need to get rid of and offload and bury and you need to bring some new things in. I'm like, OK then, and then something lands on your head, and you think, ah it's a bit of the tree, that's the bit I'm supposed to have, then. Mmmm, I think it's just listening and tuning in, I think anyone can do it, it's just that we've got this, we've had it bashed out of us as we've grown up that doing things like that is loony and weird, and we're not supposed to do it. We're not supposed to see anything beyond what is considered normal.

Talking with Nature

When KA went to University to study herbal medicine she felt that she had to shut down her spiritual side:

It just seemed to be very apparent with the, within the framework of the course itself, and what we were studying, that there didn't

seem to be any room for anything that was not scientific, not quantified, not evaluated in some way. That you couldn't say you felt this, it was always justify why you're doing that. You couldn't speak of any feelings, any sixth sense about anything, gut reactions, gut feelings. One lecturer you could possibly sit and talk to about that. Others it was almost, no.

As a student, a practitioner she knew saw what she was hiding:

Because he said to me, 'why do you hide what you do?' One day, peering over a book.....I went, 'sorry?' And then he peered over, and went 'what is it you can do?' And I said, what do you mean? He said you know what I mean? He said, you seeing things and hearing things and stuff like that. And I hid behind a book and I went, I don't know, stuff. I can do stuff. And he went, well, why do you hide it? And I said, because I can't cope with it (at university), I find this setting quite oppressive sometimes, and it's almost like, I didn't want to be perceived as a flake head of some kind, so it was just, (be) the model student that did this, did that, I just became that thing. And he said, now you're finished and you get out there, he said, don't ever bury it, he said because, why do you think I'm so successful? Why do you think people come to see me? Why do you think people love what I do with the flair that I do it and stuff? He said, people love it, but I'm true to what I am and who I am, and you've got to be too. And I said, yeah, I know. So he said, well off you go then.

After graduating and being in practice for a few years, one of KA's patients, Deborah, offered KA an acre of land on her smallholding that she thought might be suitable for growing herbs. Another of KA's patients was looking to make a financial investment and offered to back a herb farm. Together with KA's husband Tom they set up the herb farm to make fresh plant tinctures for herbalists. These herbs are tinctured within a few hours of harvesting. KA and Tom work full time on the farm, although KA still sees patients one day a week.

The land had been organic arable land but had been fallow for some years. It is surrounded by hawthorn hedges and trees, including oaks. The hundred foot end beds had been cut out first - backbreaking work with a turf cutter. They then decided on a spiraling labyrinth design.

They were influenced by the Findhorn community in Scotland and Perelandra gardens in America. KA and Tom drew on organic, biodynamic and permaculture farming methods. They wanted to set up the farm in partnership with nature. It is from this partnership that the herbs were grown and the medicines made:

Yeah when I first met Tom, I read this book about Findhorn in Scotland.....and reading this book about this guy and his wife who were just, they didn't really have a leaning towards anything, they had just heard things and saw things that you weren't supposed to see. And managed to contact, these devas that looked after these plants, and did what they were told, and turned a derelict piece of land into this amazing garden. And I thought, yeah, that's really working with nature isn't it. They say this is what you do, and you say, that's interesting, let's do it. Rather than, I'm the human being in charge, and I'm just going to do this. Because that's just us stamping our authority all over nature, and as you know nature can be a bitch and do what she wants to do. So, we thought, right, that was very important, and then that book really well, yeah, it was a life changing book to read. I thought this is amazing. So then I had little experiments. And it also explained why, when I was out in nature, that I thought things talked to me, and I thought I was going mad for a long time. Am I hearing voices? What's going on here? And then I realized no, that I could hear, and I could see, and I did have a connection with the land and the plants and the trees, some trees more than others. And I thought, there's got to be a way that you can bring this in. And then I started to read, we got into organics, and then we got into biodynamics. And when you start to read some of Steiner's stuff it's not that far removed, very much about working with nature as an entity in itself, and you think, yeah, there's something to this.....

Standing on the land that would become the herb farm, KA spoke directly to nature and a woman appeared to her:

And then I read a book by a lady who'd come over from America in the '70s, late '70s, she'd gone to Findhorn, and she had the same kind of experiences and she said, right I'm

going to go back to America, and she had an amazing set of circumstances happen in her life, like I had in mine, that led you to a point where something like this is suddenly, comes your way, and you think, aaah. And she worked exactly the same way, and her statement was just in the middle of the field one day, yelling out, I want to work with nature, spirits, and devas, and the land, and we want to work as a co-operative partnership and this is what I want to do. And I thought, well, if it worked for her, it'll work for me, so I stood in the middle of a field and that's what I yelled out.....and when I opened my eyes, there was this woman standing in front of me, and I thought who are you? And I got an idea that it was probably either a personification of the earth, or the mother earth, or goddess or something, and she just smiled and pointed, and I went, and it was said, you must plant a tree. And I'm like, OK, plant a tree, any particular tree? Just plant a tree. I was like, OK plant a tree, and then off she went. And I was like, I was just standing in the field going, OK, fine, good, am I going mad? Very probably, so I thought, yeah. Plant a tree, and then the next day my mate went, I've got a pot bound gingko, I'm going off to India, do you want it? Can you do anything with it? And I thought, put that in there, then. That will do nicely.

KA says that the woman who appeared to her was not human:

An older woman, I suppose technically a definition of what you would think was a crone, sort of older, long white silver hair, quite a kind of otherworldly countenance about her, very shyly kind of a person, thing, spirit whatever you like to call it. And I thought, it wasn't like a, you've a ghost or something where they're not quite there. Or sometimes they are. I've seen ghosts of people that are quite real, and you go, oh blimey and then other times you see things that are not, that are almost transparent, but she was quite solid and quite there. And I thought, OK, and she, I couldn't work out what she was wearing, bits of different cloth and stuff. It didn't seem to belong to anything where you could say, oh there was some native tribal stuff going on there. She just seemed to be, and I thought, good enough for me.....Some people might interpret that as God, it might have been God in some way telling me something, or one of God's angels, but I like to think it was the Goddess, because that's what I believe and

that's my. I always remember reading Micaelle's book, which we haven't got here that she said, when things appear to you, they often appear to you in the way your mind can understand and perceive them. So if you're going to see nature's spirits as little goblin fairy things, that's how your mind's eye will perceive them. If you're going to see them as people, that's how, your, but really they have no shape or form as such, it's only how we personify them. And we do, humans will personify everything so their minds can deal with it. There'll always be little people, little floaty things. Women, men, things that are not quite, you know they're not human, but you think, but they look human.

KA and Tom sought the advice of nature before making any decisions about the herb farm:

And that was the first thing we did, and then the whole thing was very much, everything we did, we stopped and had a little chat about it. What shape should it be in? What should we feed the soil with? What kind of mulch would you like? Should we put that there? And sometimes you'd get definites, no, no we want to be there. Or you'd get, well try it and see. There were no hard and fast things, and as with all things, some things work, some things don't.

Out of this working relationship with nature, they make herbal medicines that herbalists are impressed by:

But the energy of the tinctures we produce, people keep saying they've never tasted anything like it. So we're obviously doing something, and people keep saying they've never seen plants that size, and plants with that much vitality, and so if herbalists, in particular, are noticing, they're noticing the vitality, so they're picking up on the energetics of the plant, whether they know it or not, that's what they're doing, because they're commenting on it. It's not like, isn't that plant big, they're like, oh I've never seen anything like it. You're like, no, neither have I, actually.

They grow about 60 herbs on the farm. They respond to the demands of herbalists, for example growing more Wild Lettuce, Thyme, St John's Wort, Skullcap and Sweet Annie as requested. They are also looking to

bring back little-used indigenous herbs wherever possible. KA gives two examples – Mouse Eared Hawkweed and Hemp Agrimony.

.....we found out about Mouse Eared Hawkweed. Why use ephedra when we've got Mouse Eared Hawkweed? If you just want a good bronchodilator or something. It's interesting, yet no big scientific trials or studies have been done on it, but this is learnt from other herbalists who have bought this herb back again, and used it in a clinical setting and got results.....Hemp Agrimony, we're interested in looking at that, as we've heard it's supposed to be akin to a British Echinacea, but saying that, Echinacea grows well in our climate.

KA relates the story of meeting a deva of the Hawthorn while working on the herb farm:

I was working with a Hawthorn once and then all of a sudden it was like this pair of eyes were just looking at me through the tree, like this, and I thought, ah, it's a deva, it's a deva of the Hawthorn. And then it went back in and it was like a swirling kind of mist and then it came and looked again, and then I'm like, oh hello, that's nice and carry on picking. And they just watched. And I thought, well have you got anything to say to me? And it sort of, it just smiled and you felt it in the heart, and you thought, oh, I'm with the Hawthorn, and it was almost like, well this is all about heart energy, you know. And I thought, this is cool, pretty cool.

Understanding herbs as having personalities, KA describes how the personality of St John's Wort explains how it works as a herb for the nervous system:

Some of them are quite grumpy and some of them, but yet again that's a personification thing, isn't it. Some of them, because that's how we are, so we can only relate in the ways we are. And that *Hypericum* (St John's Wort) has quite a dark side to it sometimes, it's all happy, happy, happy, but if you really get into, it's like it

is, because it's whole purpose in being here is to transform darkness into light. So it does have this darkness within it which is probably why it's so good a mood uplifting thing that we give, because I said, it's not about being herbal Prozac at all, it's because that's what the plant does, you know. It just takes a load of dark rubbish and just *BLEURGH* and does that with it. And then, there are times, at certain times of the year, when you can feel it in the winter and it has that dark, it's all dark stuff, you know, and then it's almost now it's at its happiest, because it's done it's transformative work and here it is for you now, and now it's ready for you to harvest and give to people, so they can do their transformative work. And that's now, how I use St John's Wort, I use it as a nervine as well, because, it's a good nervine. But that's why it's a good nervine.

Field-work

My first visit to the farm was on an open day on a muggy damp day in June. Less than a week ago Deborah, KA's business partner, had died from cancer but it was decided that the open day should still go ahead. Herbalists and herbal students were present. There were several outbuildings, including an open-sided barn where the tinctures were prepared, and a lorry-body for storing the finished medicines. There was also a poly-tunnel, an old barge, the foundations for a community centre, an old Greenpeace vehicle, a hay bale urinal for men, plus a solid waste eco toilet. A caravan marked the entrance to the herb field. We all started to walk around the plot, following the lines of the herb beds. We passed two small and nearly hidden *Vitex* plants, pungent and aromatic as we rubbed their leaves and took a nibble. Then passed the shimmering Motherwort, pokey Mints, soft Marshmallows and giant Mulleins. During lunch in the open sided barn I asked KA what was around the corner, pointing to a path leading into a wooded area. She replied, 'Deborah, it's her grave...would you like to see it?' It had started to rain. Deborah had died at home and had been buried two days ago, after permission had been granted by the local authority. Rounding the corner the freshly turned and beautifully prepared soil of the grave was bordered by cut

flowers from the farm, and a slug moved across the grave. There was a little chair and a shrine with some Buddhist and Christian pictures. KA stood silent.

On another visit, as we rounded the corner into the herb field the heady over-sweet scent of Valerian flowers was striking, very different from the 'old socks' smell of the Valerian root that is used in medicine. Tom told me that when they had finally connected the two ends of the spiral pattern of the beds, he had felt a shock - 'like I'd put my fingers in a socket'.

We carried on walking. The leaves of the Mullein were as large as plates and as soft as rabbits' ears, with the yellow flowers opening in their spikes. The sun was out now and had burnt away some clouds. I had forgotten to bring a hat so I put a Burdock leaf on my head to keep the sun off. The orange of the Marigold flowers was so bright that it hurt our eyes to look at them. A herbalist who was also visiting mentioned that Macer's herbal, an Anglo-Saxon herbal, stated that just looking at these flowers would improve eyesight. This herbalist said that it had been discovered that Marigold contains lutein, an antioxidant beneficial to eye health, which is used in macular degeneration. Later I found that Grieve (1996 [1931]) confirmed this story about Macer, and that Pintea *et al.* (2003) found lutein in Marigold.

I helped KA and Tom harvest some Yarrow. We used some old but sharp cutting tools, which made a satisfying 'snap' with each snip.

When we had finished we took the herbs to the shredder where we fed them through till they were grabbed by the mechanism and pulled in, shredded and passed out into another basket. The herb was then weighed and divided into batches in plastic tubs and a mixture of alcohol and water added before being sealed. This would be left for several weeks before pressing out. We did the same with the Lady's Mantle: the plants were laden down with their flowers - the volume of green flowers was at least as great as the leaves.

On another occasion we harvested some St John's Wort, the yellow-flowered herb reminiscent of the drawings in old Herbals. Their unchanging form made them seem very old. Soon my hands were

stained with small dark red spots from the plant oils in the herb. When we had harvested about half the stand we took it for tincturing. Within seconds of adding the ethanol and water when you pressed down on the herb the liquid became a deep burgundy colour. Tom said that they like showing this to kids because they can't believe how the red colour, hidden in the oil glands of the leaves and flowers, came out of the yellow and green plant.

On another visit it had snowed heavily the day before and a thick blanket of snow and silence had been laid down. I arrived early and visited Deborah's frozen grave. When KA and Tom arrived we pressed out eight buckets of Hawthorn berries that had been macerating for 6 weeks. It was nearly frozen, as we were, and tasted something like brandy. We also tried some Hawthorn tincture that had been pressed out several weeks before and noticed how it was darker and somewhat richer in flavour. KA speculated about the unknown processes that occur as a herbal tincture ages, possibly like a wine.

Reflection on KA

While KA did have two visible entryways - a great aunt who helped out her community, and a personal illness experience resolved by herbal medicine - it is the third entryway, of communicating with trees as a child that is seen most in the rest of her narrative. Thus KA communicates with nature when establishing the herb farm, meeting a woman who is not a human - a non-human human, possibly. And KA continues to work with nature in making day-to-day decisions about the farm. She also sees other non-humans in the herb farm, taking on the form of 'devas', a Sanskrit term for supernatural beings. Thus there are many crossings in KA's narrative. These crossings are made comprehensible to her in that she understands herbs as having personalities. This is how she sees humans as understanding the world. Thus she relates to plants as persons.

However, she also spends nearly all her working days at the herb farm. It is constant physical work, in contact with the soil, the living herbs or medicines made from them. Amongst other things KA digs, plants, sows

seeds, washes off insects, enriches the soil, harvests, washes roots, shreds, macerates herbs in alcohol, and presses out the medicines. We will now discuss the importance of this for WHM.

Reflection on hidden entryway herbalists: from spirits to physical nature

While the hidden entryways of AF, BC and KA bear some similarities to CT and RC, the human-nonhuman entryway crossings of AF, BC and KA are somewhat different. CT spoke of the broad concept of 'naturphilia' and RC was 'involved with plants without being involved at all'. However, Red Dead Nettle and grass 'called' AF and BC respectively, and it was a Yew tree, amongst others, that 'spoke' to KA as a child. Such direct communication suggests enchanting human-nonhuman crossings.

A consideration of perspectives on shamanism may resonate with the narratives of these three herbalists. We will now look at historical and contemporary scholarship on shamanism, which suggests that shamans believe in spirits. Narby and Huxley (2001) look at how shamanism has been written about over 500 years. Their compilation of writings, as well as drawing from a long history (1535 – 2000), also visits a vast geography that includes Australia, Africa, South America and the Far East. It shows how the construction of the definition of shamanism has changed, from being sorcerers working with the Devil, to the Enlightenment aspirations of a more measured and 'objective' gaze, to the rise of social anthropology in the 19th Century that initially retained a view of shamans as 'primitives', to a self-reflexive questioning of the anthropologists' own biases in the 20th century. By the mid 20th century Narby and Huxley show that shamans had come to be seen as masters of religious ecstasy. And by the end of the last century they were moving towards being respected as complex producers of meaning on the same intellectual footing as the anthropologists living with and studying them. Although there is an increasing academic respect for shamans, the understanding of shamanic practitioners as addressing spiritual matters puts them at odds with many of the perspectives that commentators have adopted to address this research area. Narby and Huxley note that:

“Many observers, especially those trained as scientists, are philosophical materialists. They believe that everything that exists is either made up of physical matter or dependent on matter for its existence. Shamans do not. They believe in spirits” (p8).

Dubois (2009) also looks to the centrality of spirits in shamanism, suggesting that the shamanic role is a calling, a personal relationship between a human and a spirit guide. Dubois refers to Backman and Hultkrantz (1978) to argue that shamanism may be defined by the concept of spirits that are associated with all of the world’s elements, and a cosmology of worlds inhabited by spirits, as well as the practice of spirit travel by shamans achieved through trance states. Looking at shamanic entryways, DuBois (2009) identifies several factors as being central to becoming a shaman. These include the importance for shamans of being called to their role by spirits; the variable volition of the future shaman in seeking out their roles; their sometimes acquiescence to spirits; the threat of terrible consequences if the call is refused; and transformative spiritual ordeals. Thus the concept of spirits is central to most understandings of what shamanism and shamans may be.

The cases of CT and RC have elements of such shamanic considerations, even if they are relatively weak. Thus CT’s ‘naturphilia’ may be characterized as a gentle or ‘quiet’ calling. Similarly RC’s quiet calling can be seen in his ‘being involved with plants without being involved at all’ and in his ‘simply knowing things’. Additionally, RC’s own illness experience, where he found the courage to look at his own illness history, may be seen as a transformative illness experience.

However, it is AF, BC and KA that resonate more obviously with some elements of shamanism. While BC and KA both had pivotal and possibly transformative illness experiences that helped them on their route to becoming herbalists, it is the centrality of spirits that requires our attention. Spirits may be associated with plants in all three narratives. Thus AF and BC were both called by plants, with the question of who or what is doing the calling suggesting the possibility of a spiritual explanation. Furthermore AF refers to herbal medicine as a spiritual occupation, and BC journeys with plant spirits. Similarly, KA had

conversations with plants as a child and sees them in her work on the herb farm. A spiritual explanation would put these herbalists within such a partial definition of shamans.

AF's descriptions of cases and his theories of cures are compellingly told, as are KA's meetings with non-humans. Similarly BC's stories of being called by grass and of meeting Gallant Soldier in the form of Moose are well told narratives. However, they do not add up to a cosmology i.e. a theory of the nature of the universe that could add weight to the argument of these herbalists as shamans. And there is no suggestion in the narratives that any communication they have with plants is achieved through the development of trance states. Instead, such communication is gained via direct and simple acts.

While the calling of some herbalists by plants, transformative illness experiences, human-plant communication and journeying with plants suggest that herbalists and shamans are not mutually exclusive, the lack of cosmology, trance states and threatening spirits indicate that seeking an alternative perspective may be required. For this reason we look to a view of shamanism that foregrounds the relationship with non-human nature, rather than with spirits.

Abram (1997) argues that anthropology has been blind to the shaman's relationship to physical nature. Abram suggests that what defines the shaman is the ability to move out of her or his culture in order to contact 'other powers in the land. Her or his magic is precisely this heightened receptivity to the meaningful solicitations – songs, cries, gestures, of the larger, more-than-human field' (p9). Thus the shaman engages very closely with nature - arguably an enchanted crossing with elements from the more-than-human world. Abram draws on the phenomenology of Husserl and Merleau-Ponty in the primacy that he accords to direct experience. Importantly, this more-than-human world is not beyond the natural world: the shaman propels 'his awareness laterally, outwards into the depths of a landscape at once both sensuous and psychological...' (p10). And this allegiance to nonhuman nature is mastered by 'long and sustained exposure to wild nature, to its patterns and vicissitudes' (p21). For Abram, the primary role of the shaman is to connect humans with the

more-than-human by directly engaging with non-human intelligences. The shaman communicates with the more-than-human in the natural world rather than in a transcendent world. Everything is in the natural physical realm.

Using 'communication with spirits' as the reference point, as discussed above, did indeed find some associations with the herbalists discussed. However, employing Abram's contention that shamanism is about contact with the natural physical realm rather than spirits opens up a possible explanation for how herbalists arrive at the knowledge that they do.

Despite the enchantment of the narratives of AF, BC and KA there seem to be few techniques involved, rather the way to gain knowledge is seen to be by being as direct as possible. Thus AF asks living plants questions and also tastes herbal medicines; BC journeys with plants by simply going to meet them, and also has close and prolonged contact with the medicines by the aroma they produce as it fills her home; and KA is in close proximity to physical nature, working with the land and herbs. Simply spending time with them in different ways. And the other two herbalists, CT and RC, also spend time with herbs – as medicines and as living plants. As RC says it is necessary to become 'habituated' to them as living creatures. Thus, knowing herbs through growing them, harvesting them, talking to them, tasting them, inhaling them and making them into medicines is argued to be central to WHM. Herbalists are often in prolonged contact with plants and the medicines made from them. It is such contact that facilitates the awareness of spirits that we saw in AF, BC and KA. However, rather than calling these herbalists 'shamans' and seeing them as being somehow a lost link to far flung cultures, which takes them away from their localities and fosters a discourse upon them, it is more accurate to see these herbalists simply as practitioners, enchanted by plants.

The push of enchantment

The sensual affective energy of enchantment is visible in the entryways of CT and RC and is also present in their engagement with cutting edge

science. But it is perhaps most obvious in the entryways of AF, BC and KA and continues throughout their narratives. The easy drawing together of things that can be seen as being opposed to each other may be a consequence of herbalists' crossings. The presence of enchantment in the narratives of both more 'scientific' (CT, RC) as well as in more 'traditional' (AF, BC, KA) herbalists suggests that 'enchantment' cannot be seen simply as meaning 'traditional' and 'disenchantment' simply seen as 'modern'. Rather, it suggests that enchantment is a process that spreads out, from herb-herbalist relationships, in the form of a sensual-affective energy, following the trajectory of interests of the herbalists. This may be called the PUSH of enchantment, with this process having started before adulthood, and often much younger, in the lives of these herbalists.

PART IV: DISCUSSION AND CONCLUSION

CHAPTER 11: BEYOND CASES

We will now look beyond the cases. Firstly there will be a consideration of how the herbalists' cases relate to the initial sections of the thesis that considered social science work on WHM, the history of WHM and how the profession has engaged with politics and science. Then we will work inductively from the cases presented, 'up' to a theoretical understanding of WHM. Drawing on an observation made by one of the herbalists in this thesis, a suggestion will be made as to how what is at the centre of WHM can be reconceived. Following that, the discussion will broaden out to consider healthcare beyond WHM and how the findings of this thesis resonate with some recent specific developments within both science and social science. Finally, the thesis will be considered in the context of the profession of WHM that has just faced another setback on the road to statutory regulation.

Cases versus paradigms, history and the profession

It is not surprising that the narratives of individual herbalists tell a different story to much previous work that suggests that the profession of WHM is either being colonized, mainstreamed, coopted or taken over by science. This is largely because a case based narrative methodology with a focus on individual herbalists has not been used before, meaning that the felt presence of individuals and their biographies have been somewhat missing from previous research. The narratives suggest that at the level of most of the individual herbalists, there has been less of a paradigm shift from tradition to science, from herbals to monographs, from expert practitioners to evidence-based herbal medicine, and more of an enchanting takeover by herbs, both as living plants and as medicines, that encompasses both the more traditional and more scientific approaches that herbalists bring into their practices.

Whilst knowing living herbs is not important for the practices of the first four visible entryway herbalists (TE, CP, EP and JK), it is important for the nine remaining herbalists, four of whom had visible entryways (SB, FD, GA and MN), and five of whom had hidden entryways (CT, RC, AF, BC and KA). And of these nine herbalists, three of them (SB, CT and

RC) draw heavily from mainstream and cutting edge science, while the remaining six herbalists (FD, GA, MN, AF, BC and KA) draw relatively more from traditional knowledge.

Thus the herbalists, who have been seen in the cases to draw from a wide variety of influences, have more agency in their narratives than has been seen in previous work, which has tended to identify themes across data. Additionally, the herbs themselves, as living plants and as herbal medicines, are also seen to have more agency in their enchantment of herbalists, than has previously been described.

This finding is partly because one of the strengths of narrative research is that it allows questions to be brought to the surface that the researcher had not anticipated. So how might the narrative cases permit the early part of this thesis, which looked at the history of WHM, its professionalization and engagement with science, to be further understood?

Even though orthodox medicine has separated itself from herbal medicine, herbal medicine is wedded to scientific knowledge, both in its training and in the various manifestations of its practice. Of the cases represented here, TE is the herbalist who is most obviously aligned with orthodox medicine and professionalized practice. Whether his approach reflects the majority of what goes on in WHM in the UK is beyond the scope of this thesis, but it is an approach that the professional bodies and other institutions of WHM are likely to endorse in their engagement with science as a strategy for political survival.

The fragmented history of WHM, as described previously, suggested that the separation of herbal medicine and orthodox medicine took place over a rather lengthy time period – ranging variously from the reign of Henry VIII in the 16th century to the demise of botany as the basis of medicine in Edinburgh in 1961. While there are undoubtedly many factors contributing to this being a long goodbye rather than a short one, the enchantment of plants may be one of them. After all, Henry VIII wrote and compounded his own prescriptions and was instrumental in the passing of what became known as The Herbalists' Charter. And Professor Bayley Balfour's physical contact with plants as a botanist may

have impacted on his teaching of botany as the basis for medical education in Edinburgh. Furthermore, the historical attachment of herbalists to their 'vegetable substances' in the 75 years leading up to the end of WWII (Brown, 1985) could partly be accounted for by the sensual affective energy of the enchantment of plants. Although we do not have these herbalists' narratives in order to be able to look at this question, the herbalists from then and from now both had and have a similar belief in the use of whole plant medicines or simple extracts as well as in what has come to be called the 'synergy' of constituents within a plant. This does not mean that they related to or felt the same way about plants as the herbalists in the cases do, but it is a possibility that should remain open.

Let us look to the Thomsonian system of medicine, which influenced the development of WHM in the UK as described in the early sections of this thesis. Thomson had borrowed heavily, although likely indirectly, from Native American knowledge in the development of his herbal therapeutics and vapour baths (Winston and Dattner, 1999). He recalls, at the age of three or four, meeting 'an old lady by the name of Benton' who made medicines from roots and herbs. Thomson would go out with her to gather her medicines: 'she would take me with her, and learn me their names, and what they were good for; and I used to be very curious in my inquiries, and in tasting every thing that I found. The information I thus obtained at this early age, was afterwards of great use to me' (Thomson, 1849, p131). Thomson knew these herbs as living medicines, tasting them straight from the plant. He could not read or write, but learnt from Benton and directly from the plant by tasting them. He remembers one particular plant, Lobelia: 'The taste and operation produced was so remarkable that I never forgot it. I afterwards used to induce other boys to chew it, merely by way of sport, to see them vomit' (p131). Thomson's engagement with herbs via tasting them has a sensual and experiential element to it, as well as an occasionally mischievous one, that speaks of a direct contact with his environment. This is not far removed from Abram's understanding of non-alphabetic cultures, and it is possible that these experiences could have provided a sensual knowing of plants,

even an enchantment, although this word would not have been used, especially given Thomson's strict Christian upbringing. It is possible that this way of knowing plants supplied him with a sensual affective energy that contributed to the success of his system of medicine, which eventually spread over many states in America, and came to the UK. This is not to say that knowing plants in such a way is to be prioritized over historical, economic, political and other factors in explaining the success of a system of medicine, but it is not one that should be excluded either.

Let us now turn to the relationship between the trajectories of enchantment as seen in the cases on one hand, and the political history of the profession along with the profession's engagement with science, as seen on the other hand. This is a relationship of 'purification', with herb-herbalist crossings being written in invisible ink. The story is a similar one as to why the enchanted entryways of herbalists are also necessarily 'hidden' entryways, which was discussed above. As we have seen, with Latour's 'Modern Constitution' came the separation of Science and Objects and Nature from Politics and Subjects and Society - the Nature/Culture divide, for short. Any hybrids between Nature and Culture are swept under the carpet. Purification of Nature from Culture is valued and claimed, while hybrids are denied. Just as the enchanted entryways are by definition hidden in modernity, so to are any other enchanted crossings between herbalists and plants within professional discourses. In seeking to engage with science they have no choice but to separate out subject from object, and culture from nature, and herbalists from herbs. It is a simple story and one that continues to be told. However, the narratives of herbalists suggest that while purification is present at the level of the profession, at the level of the individual, there are hybrids and crossings. And if this is true for some herbalists now, it is also possible for at least some herbalists in the past. What would Fred Fletcher-Hyde, Thomas Bartram, AW Priest and LR Priest, Maud Grieve, Dr Coffin, Finlay Ellingwood, William Cook, Nicholas Culpeper, John Parkinson, John Gerard, William Turner, Leonhart Fuch, Hildegard von Bingen, Galen of Pergamon, Pliny the Elder and Pedanius Dioscorides reveal

about their relationship to and with herbs and how this relates to the rest of their lives and to their practice of medicine? Although it is beyond the scope of this thesis, it would be interesting to study these authors to ask whether there is more enchantment in the writings and lives of those who lived, wrote and practiced before the arrival of Latour's 'Modern Constitution' that came with Thomas Hobbes and Robert Boyle in the mid seventeenth century.

Herbalists and Western Herbal Medicine

While the 13 cases discussed above are phenomena in their own right, cases also have the potential to be relevant beyond their own sites (Law and Mol, 2002). These cases will be now be used as a resource to do theoretical work and to ask questions about WHM.

Beyond the science/tradition dichotomy in Western Herbal Medicine

Hidden crossings between humans and non-humans, between herbalists and plants, have been seen in the entryways of some herbalists. Such crossings have also been seen in the later parts of herbalists' narratives, both in those who had such hidden entryways and those that did not.

This constitutes the 'push' and 'pull' of enchantment, a sensual affective energy that spreads throughout many of the narratives, sometimes starting before formal study begins and sometimes afterwards.

Beyond the hidden entryways, later in the herbalists' narratives, these crossings are sometimes between humans and non-human nature, for example where a near death experience led to knowing living medicinal plants differently, or where a truth-to-nature methodology based on Goethe uses the human being as the 'perfect instrument for reading the book of nature'. However, such enchanted crossings can also be seen between humans and more simply material substances, such as a particular herbal preparation that had a physiological effect and then affective effect on the herbalist. Enchanted crossings can also be seen in ways of thinking, such as when a herbalist who is in awe of plants also has an arborescent desire to get beyond the orthodox diagnosis to the 'root' or 'kernel' of the patients illness, or when a herbalist identifies

complexity theory as resolving incompatibilities between holism and reductionism. Crossings between one realm and another can also be seen when a herbalist helps patients to treat their own illness metaphors as if they are real.

Importantly these crossings have occurred in the lives of herbalists who draw on apparently more 'traditional' influences as well as those who draw on apparently more 'scientific' influences. 'Apparently' is used advisedly twice here because it is notable that individual herbalists may draw easily and smoothly on both of these designations. Thus CT is influenced by both complexity theory AND 'naturphilia'; RC takes a priestly sacerdotal approach AND focuses on the minutiae of the horizontal relationships between hormones; AF looks to physiology AND to talking to plants; SB needs the awe of knowing living plants in order to practice AND traces the cause of a patient's illness back, at least partially, to a gastro-intestinal infection; EP practices orthodox First Aid AND differentiates between wind-heat and wind-cold; JK practices 'proper diagnosis' derived from an orthodox approach to taking the case history and to conducting a physical examination AND also draws on the 'tissue states' of Physiomedicalism; and MN, along with his wife, RN, developed Goethean science AND uses an orthodox medical approach to the case history and physical examinations.

Even if we choose to categorize some herbalists as either 'more' traditional or 'more' modern and scientific than others, the presence of enchantment within the narratives of both of these possible groups suggests that enchantment cannot be seen simply as some manifestation of residual tradition that will be eclipsed by the onward march of science and modernity. Rather the enchantment of crossings, often between herbalists and living plants, but also between herbalists and their many engagements with herbal medicine, can be seen as an energy that is present within the narratives and lives of herbalists and hence, at least to some degree, within WHM.

Enchanted trees and rhizomes in Western Herbal Medicine

To understand how this energy spreads out we will return briefly to Deleuze and Guattari (2004). Arborescent thought, as introduced in the case of SB above, implies some sort of genealogy, where routes that bifurcate and spread out can be followed. In this thesis, the enchantment of herbs can be seen to be such an arborescent energy, found in the seed of the hidden entryways but also at places further along the narratives of some of the herbalists, in the stems and branches and leaves and flowers of their accounts. However, this is not the end of the story, because, in opposition to this linear, vertical and causal arborescent concept of enchantment, there are more 'rhizomal' influences present within the cases. For Deleuze and Guattari (2004), the concept of the rhizome, drawn from botany, is more about alliance than filiation. The rhizome is in the middle between things, it is multiple, non-hierarchical and made up of heterogeneous connections. The cases of the herbalists are rhizomes in that they draw on a wide number of diverse influences that they bring into their practices and that sit side by side without fear of contradiction. If plants and herbalists can meet and cross then herbalists can easily draw from a wide range of influences that others may see as being incommensurable.

What follows are some phrases derived from what was seen in the trajectories of the narrative cases. They are presented as a single list, punctuated only by commas and spaces. They are presented in the same order as the herbalists' cases, although other orders could have been chosen. It is hoped that this list, that is incomplete, and could have been differently selected from the material, and which can be added to, is respectful of the complexity of the cases discussed, even if the cases are examples of either hidden or visible entryway herbalists. It is one possible 'list of WHM':

Herbal medicines are drugs, his case notes are more extensive than the GP's notes, GP's say he should get 'fully' qualified, he does not see himself as a peer to the GPs, there is a lack of good information on herbal medicines, the delight of her own and her patients'

cervical mucous changes, empiricism wins over theory, I didn't know why I'd got it right and I didn't know why I'd got it wrong, poetry of Chinese Medicine that leads easily from diagnosis to treatment, the proper diagnosis of the orthodox case history and physical examination, pure pleasure and diversion of her own wood, tissues states and Physiomedicalism, needing the awe of the magnificence of plants in order to practice, scents and touch of plants, getting to the root causes, to the kernel, peeling back the onion, going back in time when treating a patient, struggling with the profession, do the right thing, where's the herbal medicine in all this politics? knowing plants differently after having an accident and nearly dying, a friendly tree leading to cancellation of surgery, knowing herbal medicines as living plants, herbal medicine as an offering of love across the kitchen table, he only uses a plant if he has a connection with it, everything goes through herbal medicine, his parents used three pinches of Pearce and Duffs herbs in 18 years, treating metaphors as if they are real, pleasure of small signs, a medical student considers retraining as a herbalist after tasting Plantain, always wanted to be a doctor, detective work of orthodox medicine is needed for herbal practice, truth-to-nature, Goethean science as a method for understanding nature, the human being as the perfect instrument for reading the book of nature, using the same seven step methodology to understand plants and patients, Complexity theory as uniting reductionism and holism, naturphilia, listening to trees, words and herbs as pharmacological agents, doing psychotherapy by stealth, being involved with plants without being involved at all, simply knowing things, finding his theory of cure, endobiogenics as being culturally attuned, no more sticking pins in the British Herbal Pharmacopoeia, horizontal relationship between hormones, a priestly approach, becoming habituated to plants, energetics – working directly with the herbs, talking to plants, tasting them, constitutional medicine, supporting physiology, emotional causes of illness, herbal medicine is about you, called by Red Dead Nettle, pruning a climbing rose as an apprentice, using local

herbs, surrounded by grass that called her, surrounded by the smell of medicines being made, nature girl, own illness experience, patients learn through their stories, young maid, intuition, understanding an accident, the herb Gallant Soldier appearing as Moose, great aunt who always sorted people out, talking to trees as a child, deva of the hawthorn, spirits appearing in human form because that is how we relate – through personification, working hard with nature.

This list of what has been found within the narratives of herbalists is unlikely to have the same impact on the reader as Borges' list of animals from 'a certain Chinese encyclopedia' did on Michel Foucault (2001). However, it is hoped that the list is 'thick' enough and open enough that the reader gets a taste of what WHM may be, even if the cases need to be read in their entirety to fully appreciate the list.

Taken together, the cases suggest the rhizomal nature of the diverse influences that herbalists have in their lives, along with an arborescent thread of enchantment that moves within and between some of them. There may be a thread but it does not travel in a straight line.

Crossings and Difference in Western Herbal Medicine

It is a contention of this thesis that the easy sitting together within these herbalists of different influences is at least partially due to the crossings of herbalists with plants and herbal medicines that we have seen in the hidden entryways and later narratives of the herbalists. This drawing together of diversity would not have been possible without CT's 'naturphilia'; or without RC's 'being involved with plants without being involved at all'; or without AF being called by Red Deadnettle and his energetic methods of working directly with plants that includes talking and listening to them as well as tasting them; or without BC being called by grass and surrounded by the aroma of the medicines that she makes; or without KA talking to the land where she grows herbs and makes medicines; or without the 'awe' that SB experienced as a child in his gran's garden and the 'magnificence' of the plants in his own garden; or

without CP having herself experienced taking the herb *Vitex agnus-castus*; or without FD having had a serious accident and being offered help by Jesus and a tree-branch; or without GA's experiences with plants that 'are speaking to me all the time', even if the words are voiceless; or without MN's passion for spending time with plants, either growing them or in observing them in detail throughout their life cycles and recording this information in a structured methodology.

It boils down to a simple hypothesis: if the herbalists can somehow cross with herbs, if species from different kingdoms, namely humans and herbs, have membranes that are more permeable to each other than is usually thought, then bringing diverse influences into the lives and practices of herbalists, as seen in the cases and in 'A list of WHM', is a simple reflection of this ability to accommodate, even welcome, difference. And if this is true for individual herbalists, it is arguably true for WHM.

Plants and texts in Western Herbal Medicine

Crossing with herbs as non-human nature and as medicines is important for some herbalists. This results in the easy accommodation of difference in the narratives and practices of herbalists and possibly within WHM.

What further effect might this enchantment have on WHM?

To answer this we will return to Abram (1997) for a moment. Abram argues that our separation from nature began with the invention of the alphabet. For Abram it was writing that led language to become separated from the world. Abram tells a story from Plato's *Phaedrus*, where Socrates informs a friend that 'I'm a lover of learning, and trees and open country won't teach me anything, whereas men in the town do' (cited in Abram 1997, p116). Abram suggests that the alphabet can separate humans from experiential relationships with the natural world. He compares the sensuous relationship that indigenous oral cultures have with nature with the separation from nature that is found in alphabetic cultures. While oral cultures use all their senses, the written word needs only eyes and ears. While pictographs initially maintained a visual connection with nature, by the time the Hebrew alphabet became

the Greek alphabet the letters had lost any visual meaning and separated the human from the natural. Abram says that 'with the phonetic *alphabet*, the written character no longer refers to any sensible phenomenon out in the world..... but solely to a gesture made by the human mouth' (p100, emphasis in the original). For Abram, the 'animating interplay of the senses has been transferred' from the animate earth 'to another medium.....the written text' (131). He suggests that 'The participatory proclivity of the senses was simply transferred from the depths of the surrounding life world to the visible letters of the alphabet.....our senses are now coupled synaesthetically to those printed shapes as profoundly as they were once to cedar trees, ravens, and the moon' (p138). Both trees and texts can be enchanting.

So what is the relevance of this to WHM? It raises the question as to whether it is purely coincidental that some of the herbalists' hidden entryways occurred when they were very young, while 'still in nappies', and as a five year old, and while 'in a pram', before they would have their senses distracted by written words? Maybe enchantment with nature is easier without texts.

Another possibility is that the contact with nature seen in the narratives of the herbalists could explain why allegiance to particular written texts seems to be LESS foregrounded in WHM than in other traditions that also use herbs, such as Chinese Medicine or Ayurveda, where systematic theories of cure are more readily found. If knowing plants sensually and directly, particularly through taste, smell and touch, and temporally, through simply spending time with them, is important for herbalists, then there may be less need to locate 'the animating interplay of the senses' in texts. Thus WHM may be less textual and less positioned within a theoretical framework than other traditions that employ herbs. While CT found Ivan Illich's 'Medical Nemesis' important in his journey to become the herbalist that he is today, and AF spent much time in the Wellcome Library researching the historical use of herbs and remains influenced by the 16th century herbalist Nicholas Culpeper, and RC found his Theory of Cure in Lapraz and Durraffourd's French language books, WHM is certainly less dependent on particular historical

and theoretical texts, and arguably less dependent on particular contemporary key texts, than other traditions, although much of the modern training of herbalists draws on databases and Mills and Bone's 'Principles and Practice of Phytotherapy'.

This is also noted by Pitman (2005), who perceives a 'lack of connection in Western herbalism to its historical roots. This seems to contrast with Chinese, Ayurvedic and Tibetan traditional medicine' (p99) While this could partly be accounted for by the institutionalization of BSc herbal medicine training in Universities where the history of herbal medicine has not been uppermost in the curricula, the absence of texts without which herbalists feel they could practice does raise the question as to whether allegiance to living herbs, known sensually, is an important resource in WHM.

WHM appears to draw on a wide and eclectic range of written sources, as can be seen by the 'core curriculum' discussed earlier. This is contrasted with Chinese Herbal Medicine, where, for example, The Yellow Emperor's Classic of Internal Medicine, and the Classic of Herbal Medicine are revered texts, without which it would be difficult to practice, even if this knowledge is often interpreted in more contemporary texts rather than referred to directly. And in Ayurveda, there are twelve key classical texts that modern training in the UK is based around.

The relative lack of reverence to particular texts in the profession of WHM and the concomitant wide variety of texts that herbalists draw on may be a consequence of the engagements with living nature that herbalists participate in, such that herbal knowledge is derived partly from sensual contact with plants.

The agency of herbs at the centre of Western Herbal Medicine

The arguments so far, that locate the enchantment of herbs within the narratives of herbalists, raise questions about the agency of plants. Despite the best efforts of modernity, plants are more than simply therapeutic tools to herbalists. The crossing of herbalists with herbs, either as living plants or as medicines, works against the science/tradition dichotomy and allows difference to be brought into practice.

Herbs are at the centre of WHM, both literally and also materially. While other traditions that use herbal medicines have concepts as their central institutions, WHM has the material herbs themselves, even if this sometimes leads herbalists to look 'outside' for concepts and theories of cure. Thus the central institutions of Chinese Medicine include yin, yang, qi and zheng, and Ayurveda has vata, pita, kapha and prana. However, WHM has Meadowsweet, Horsetail, Yarrow, Lady's Mantle, Hawthorn, Sage, Black Cohosh, Echinacea, Wood Betony, Vervain, Marshmallow, Marigold and Chamomile, to name but a few, at its centre. In fact, this is likely to be the open-ended, complexity respecting list that is at the heart of WHM as a system of medicine. And, as we have seen, while herbs are material objects they are not separated from the herbalist's subject.

There are crossings and enchantments throughout the cases.

Thus herbs are not simply passive resources for herbalists, but have more agency than that. However, how to talk about the agency of the non-human is a thorny question. If plants 'communicate' with herbalists, how is it possible to discuss this agency without viewing accounts as simply fictional or symbolic?

As mentioned previously, Actor-Network Theory has provided one exploration of agency, but it is one where agency is dispersed in networks of people, non-human life (e.g. scallops), concepts and things, where these actors are the products of the networks that they are in, and not vice versa. While this approach avoids the difficult question of intentionality it also, almost by definition, avoids addressing what Harman (2015) calls the 'echoing, resounding, vibrating, unexpressed metaphysical reality of objects' (p7), which would include the enchanting effect of herbs on herbalists. It is this reality that is felt to be important in the herb-herbalist relationship, so Actor-Network Theory will be rejected as a tool for understanding this relationship, even if it was useful for understanding the invisibility of some herbal entryways and of some aspects of WHM.

Herbalists and herbs: each other's convivial tools

The cases presented in this thesis suggest that, while the profession continues to engage with science and with a political environment that obscures herbs, some, but not all herbalists, are enchanted by their relationship with herbs, both as living plants and as medicines.

Of the 13 herbalists considered in this thesis, 9 of them (SB, FD, GA, MN, CT, RC, AF, BC, and KA) reveal, in various ways, the enchanting importance of knowing living plants for their practices. And of the remaining 4, only one of them, TE, reveals a narrative that is aligned with the profession's disenchanting engagement with science and politics. Given the centrality of herbs to most of the herbalists' cases this raises the question as to how we may conceive of the relationship between herbalists and herbs. The cases suggest that herbalists bring in eclectic influences to their practices and therefore have more agency than might be expected if one were to stick to the arguments made by the profession's engagement with science and politics. Similarly, the cases suggest that herbs, as living plants and as medicines, are not simply material that is instrumental to human agency. Rather they enchant herbalists and in doing so, demonstrate their own agency. Thus, *Vitex agnus-castus* affected CP and now she uses this plant medicine on most of her patients. SB couldn't practice herbal medicine without a connection to the 'awe' and 'magnificence' of living plants that started when he spent time as a young boy in his grannie's garden and now continues in his own garden. FD finds that she can only use herbs that she knows as living plants, that 'we have down here'. GA hears the voiceless words of living plants in 'the murmurings of the wind through the leaves', and harvests Plantain and Lemon Balm from the grounds of the grim medical centre where he works, giving them to a medical student to taste who then wonders about retraining as a herbalist. MN had to develop an understanding of living plants through prolonged cultivation of them before he felt ready to study herbal medicine formally. CT has a 'naturphilic' predisposition as a 'default that I can access' and sees herbs as being able to 'nudge' and 'push' and 'recomplexify' patients back towards wellness. RC found it necessary to 'become habituated' to living

plants in order to find his theory of cure in endobiogenics. AF was called by red deadnettle and teaches others to know herbs as directly as possible, including through talking to them and tasting them. BC was called and surrounded by grass while still in nappies, and now fills her house with the aroma of the medicines that she makes. And KA talked with trees as a kid, and sees Hawthorn devas in her herb farm where she converses with nature in looking after the land. Herbs, in their ability to enchant herbalists, have more agency than might otherwise be anticipated.

In order to conceptualize the relationship between herbalists and herbs where agency is located both in humans and in plants we will now turn to an observation made by one of the herbalists in this thesis. CT was influenced by the critical position of the radical polymath Ivan Illich (1995[1971]), 1974, 1973) in relation to the rise of the professions and CT also has a personal connection to Illich. Regarding herbs, Illich's 'Tools for Conviviality' (1973) was particularly important to CT. Illich sought to 'give people tools that guarantee their right to work with high, independent efficiency' (p10). Hand tools, telephones and bicycles are examples that Illich would have seen in the 1970s. We could say additionally that web 2.0, personal computers and smartphones have the potential to be today's convivial tools, while the open source movement and the maker movement are arguably communities organized around convivial tools.

CT asks 'if herbs are tools what kind of tools are they?' He refers to three quotes from Illich (1973):

I choose the term 'conviviality' to designate the opposite of industrial productivity. I intend it to mean autonomous and creative intercourse among persons, and the intercourse of persons with their environment...(to) permit the evolution of a life style and of a political system which give priority to the protection, the maximum use, and the enjoyment of one resource that is almost equally distributed among all people: personal energy under personal control (p11).

Convivial tools are those which give each person who uses them the greatest opportunity to enrich the environment with the fruits of his or her vision (p21).

Tools foster conviviality to the extent to which they can be easily used, by anybody, as often or as seldom as desired, for the accomplishment of a purpose chosen by the user....They allow the user to express meaning in action (p22).

A consideration of the various enchantments in the herbalists' narrative cases suggests that there is certainly 'intercourse of persons with their environment', whether in contact with living plants or with herbs as medicinal products. Additionally, the wide variety of 'rhizomal' influences that herbalists bring into their practices suggests that 'personal energy under personal control' is true for many herbalists. And if we think of the possible effects of these influences on patients through the consultations then it is likely that the herbalists' environments are enriched 'with the fruits of his or her vision'.

Looking to the final quote, herbs in general can be used by anybody, which has arguably been a factor in the difficulties that the profession has faced in securing a protected title for its members. They simply have to be picked, for example from your park or between cracks in between paving stones, then washed and eaten or dried, or have boiling water added to them, or simmered in water, or extracted and preserved with alcohol and water, or infused in oil, or added to creams.....The processes are not complicated. If you have a kitchen you can make herbal medicines. And of course, you can always buy herbs from shops or specialist suppliers.

While herbs as used by herbalists are chosen for their medicinal effect on patients, how this is conceived has been shown to be wide and varied, for example, from 'nudging' and 'pushing' to addressing the horizontal relationships between hormones, from working with physiology to treating the emotions, and from restoring tissue states to reminding patients of their intention. Hence, for herbalists the 'purpose (is) chosen by the user'. If we take Illich's last point, that convivial tools 'allow the user to express meaning in action', in each of the cases we can see herbalists

expressing diverse meanings through their engagement with the convivial tools of their trade. Thus TE sees herbs as being drugs and being particularly efficacious for gastro-intestinal conditions. CT seeks to resolve apparent incompatibilities between reductionism and holism through engagement of herbs with complexity theory. He also sees both words and herbs as being pharmacological agents. RC found that it was necessary to 'become habituated to plants' in order to find his 'theory of cure', which he eventually found in the 'culturally attuned' system of endobiogenics, with its complex understanding of the horizontal relationships between hormones. AF, in his practice, seeks to get to the most basic level at which to treat patients. He works 'with physiology' or treats emotions or uses traditional energetic understandings, slipping between these approaches, depending on the case. BC enables patients to tell their stories and facilitated the journey of the story of Achilles and the plant *Achillea* (Yarrow) from 'modern' England to 'indigenous' South America. KA knows and works with plant and nature spirits. SB doggedly seeks to track down the 'nuggets' that causes his patients illness. CP saw enchanting signs of fertility in her own body that trumped the theoretical considerations of Chinese Medicine that she is also trained in. EP is drawn to the safety of WHM but also to the poetry and beauty of Chinese Medicine, where diagnosis more directly leads to treatment. FD became disenchanted with the politics of the WHM profession and eventually moved to just using herbal medicines that she knows as living plants. JK is attracted to the 'proper diagnosis' of orthodox medicine but addresses the 'tissue states' of her patients. GA encourages his patients to treat their metaphors as if they are real, seeking transformative experiences for his patients. MN and his wife apply the same methodology for understanding plants to understanding their patients. From the above, herbs can be seen to be convivial tools, with a wide variety of meanings being expressed in the narratives of herbalists through their engagement with the convivial tools of their trade. Seeing herbs as convivial tools is a useful way of understanding medicines that grow.

Illich is aware that in English 'convivial' has a meaning of 'tipsy jolliness', which is why he only uses 'convivial' in reference to 'tools'. However, a brief look at the etymology of 'convivial' will reveal why this term is additionally suitable to herbs as seen in relation to herbalists in this thesis. Convivial is derived from 'com' meaning 'together' and 'vivere' meaning 'to live'. Thus a convivial life requires connection with others. Conviviality also means 'pertaining to a feast'. Again, you can't really have a feast on your own. But additionally, feasting is a sensual experience and it has been shown that for herbalists, the senses are important, which has implications for understanding WHM.

The possibility that herbs have more agency than might be expected has been seen in the enchanting effect on herbalists. This leads to the suggestion that herbs and herbalists may be seen as 'each other's convivial tools'. Not only are herbs the convivial tools of herbalists, but herbalists can be seen as the convivial tools of herbs. This would require that herbs have relationships with herbalists, possess an energy that is under their control, enrich their environment with varieties of herbalists that benefit herbs, and that the meaning of plants is expressed in herbalists. This is a challenging question to grasp, and even more difficult to answer but one which the cases point towards, if not right up to.

We can begin to look at this question by asking how herbs benefit from their relationship with herbalists. To do this we turn to Luci Attala. Attala (Attala, 2014) explores the benefits of being eaten. That is, specifically the benefit to plants of being eaten by humans. Attala suggests that 'being edible can be repositioned as a phytochemical communication strategy that some plants use to initiate affective relationships with the human animals that consume them' (p1). Attala points out that while ethnographic accounts highlight plants as chemical communicators with humans via ingestion, plant science, while addressing plant agency, keeps humans excluded from plant awareness and behaviour. She asks, given evidence that plants utilize their phytochemical resources to persuade other species to provide them with assistance, 'is it likely that humans are exempt from their charms and are not beneficiaries of their instructions?' (p2). Attala suggests that 'ingestion of another can be

usefully repositioned as part of a long-term chemical dialogue rather than a destructive event' (p1). From this perspective, being edible is a mechanism that plants utilize in order to develop relationships with humans. Attala gives the example the Amerindian hallucinogenic plant preparation Ayahuasca that is used in ritual healing, the ingestion of which enables long-term relationships between humans and the plant being. For Attala, being edible is more than simply promoting seed dispersal. After being picked, plants endeavour to retain human attention through taste, chemical breakdown and assimilation. Attala gives the example of how physiological addiction to plants, such as coffee, tea, cocoa, sugar cane, opium, cannabis and tobacco means that 'addicted individuals work extremely hard to retain access to their substance of choice' (p5). Attala suggests that both plant induced hallucinations and cravings for plant foods demonstrates plant 'proficiencies' in provoking 'caring responses from humans, who protect, seek out and proliferate plants they are attached to because of these capabilities' (p5).

Regarding WHM this raises a particular question: do herbs cultivate relationships with humans, including herbalists, through being medicinal? This is one way of looking at the agency of herbs. It is interesting to note here that many of the phytochemicals that have been shown to be medicinal, including alkaloids, glucosinolates, terpenoids, phenolics and glycosides, are classified as 'secondary metabolites' that are not involved directly in growth, metabolism or reproduction and are not essential to the life of plants.

After all, a plant that is medicinal is likely to be looked after. And all of the herbalists in this thesis either grow or wild harvest or buy herbs for their patients, as do herbalists outside of this thesis. From this perspective the professionalization of herbal medicine along with its engagement with science and its historical battle to maintain the right to practice and the right to access herbal medicines can be seen in part as a response by the profession to the enchantment of herbs such that herbs are cared for and allowed to flourish.

Enchantment in orthodox medicine and CAM

The current work has identified the enchantment of plants in the narratives of individual herbalists and has followed this sensual affective energy as it spreads into WHM, with both herbs and herbalists' exhibiting more agency than has previously been considered. The question remains as to whether this enchantment is localized to WHM or whether related varieties of enchantment may be found within other healthcare professions.

Orthodox medical practice has long separated medical doctors from their prescribed medicines. Doctors know their medicines through their training, official formularies, marketing materials, clinical research updates and continuing professional development requirements as well as through their encounters with patients. While knowing the pharmacology of these medicines, their effects on receptor binding sites and inhibition or activation of multiple physiological pathways offer Kantian opportunities for enchantment of the mind, doctors do not have the opportunity of proximity to, or sensual contact with, drug medicines that is afforded to herbalists. It is not so much the drug medicines themselves that may offer up the possibility of enchantment to medical doctors, as the science behind them.

So the potential for medical doctors to be enchanted by the drug medicines themselves is rather less evident than for those who use medicines made directly from once-living plants. However, one location where the enchanting power of drugs is mundanely accepted is found at the near-apex of the hierarchy of evidence-based medicine. To get to this point on the pyramid it is required that clinical trials have a placebo arm, where the simple possibility of receiving medicine is seen to affect physiology, even if it is not actually given. Drugs can certainly enchant patients and their physiologies.

Looking away from both WHM and orthodox medicine, what opportunities for enchantment are to be found in other CAM practitioners' relationships with their tools or objects of intervention? While using crystals to heal disordered energy patterns, or identifying markings in the iris of the eye that reveal dis-ease, or the laying on of hands on chakras may provide

more obvious locations of enchantment, the 'Big Five' CAM therapies also offer up sites. WHM, the subject of this thesis, is one of these five CAM therapies that are regarded as the most substantive therapies by governmental bodies, yet has been seen in this thesis to harbour enchanted narratives. The remaining four of the Big Five are osteopathy and chiropractic, acupuncture, and homeopathy, the first two of which have been regulated by statute. Of these, cranial osteopaths use their hands to sense and work with the rhythmical movements of the cerebrospinal fluid and the patterns of movement of tissues and organs. And acupuncturists palpate nine different pulses and can detect about 30 different qualities in them before precisely inserting needles into specific points on invisible energy lines along the body. And homeopaths have remedies that become more powerful the more they are diluted and shaken, with this potentization continuing beyond the point of having anything materially detectable left within them.

However, as discussed above, these sites of enchantment, in WHM and in other CAM therapies, are hidden from view by the foregrounding of practitioner qualifications, competency, responsibility and ethical conduct as the criteria for political acceptance rather than attention to the specificities of the therapy. Furthermore, in a similar way to herbs being separated from herbalists, with politics regulating herbal practitioners and science investigating herbs, modernity also separates out potentized remedies from homeopaths, needles and points from acupuncturists, and cerebrospinal fluid movements from cranial osteopaths. However, if you ask these practitioners for the narratives of their engagements with potentized remedies, points and fluids they are likely to give you interesting stories that may reveal the crossing of boundaries between culture and nature, subject and object, and politics and science.

To repeat Weber's quote from nearly 100 years ago:

'Precisely the ultimate and most sublime values have retreated from public life either into the transcendental realm of mystic life or into the brotherliness of direct and personal human relations. (Weber, 2004 [1919], p30). Today it seems that enchantment in WHM can be found in the 'brotherliness' of direct relations between herbalists and plants, rather

than in the public life of WHM. Similarly, other CAM therapies may exhibit such tensions between personal narratives and official discourse of the professions.

CHAPTER 12: BEYOND WESTERN HERBAL MEDICINE

In order to contextualize the findings of this thesis we will first consider the place of plants in the Western philosophical tradition. Then we will turn towards recent developments within the material object oriented approach of plant sciences that break with this tradition and addresses questions of plant agency. Following this we will address the social sciences, where the agency of the non-human is also being considered.

The place of plants

Hall (2011) argues that Theophrastus (371 – 287 BC), the ‘father of botany’, deduced from observations that plants should be approached on their own terms as having their own purpose and not merely being instrumental for humans. However, in the Western philosophical tradition, Theophrastus was overshadowed by Aristotle, Socrates and Plato. In this understanding the ‘vegetal’ soul that represents botanical life was placed firmly at the bottom of the pyramid, with humans placed firmly above. Plants were ascribed only a ‘nutritive’ level to the soul, denied access to the ‘sensitive’ or ‘intellectual’ levels. As already noted by Abram (1997), Plato writes that Socrates, in the play Phaedrus, says ‘I am devoted to learning; landscapes and trees have nothing to teach me – only the people in the city can do that’ (p116). Marder (2013) also looks back to antiquity and highlights the Platonic inversion of the plant where humans are rather upwardly ‘rooted’ in the world of cognition and thought. Hall sees the non-perception of plants as continuing throughout history. He refers to Wandersee and Schussler’s concept of ‘plant blindness’. The symptoms of this condition remain largely present today and include the failure to see plants in one’s life, the positioning of plants as a backdrop to animal life and the misunderstanding of the different time scales of plant and animal life. The disease of plant blindness, starting with the rejection of Theophrastus, has followed various trajectories up to this day. Hall cites the impact of Francis Bacon, the Enlightenment philosophy of Descartes, the growth of rationalism as well as Christian doctrine that viewed plants as purely passive, lacking the ‘breath of life’. Hall also discusses Eastern cultures, which are not simply portrayed as seeing

what the blind West cannot. For example, in some major Buddhist schools and in some Hindu texts plants are relegated to a lowly status, although the Vedanta school of Hinduism is cited for its emphasis on the interconnections of all living things. Despite this, it is the Western conception of plant-hood that has viewed plants for the most part as purely instrumental to human requirements.

Changing perceptions of plants in plant science

Despite the marginal place of plants in the West and beyond, there are signs that this may be changing. One such field is to be found in the academic discipline of plant sciences, where how plants are perceived is being questioned.

While this endeavor has highly respected origins it has taken a long time for it to develop into a visible sub-discipline. We will start with a look at some historical aspects of this field before moving on to an overview of recent developments, which will be followed by more detailed observations of some recent work and end with a consideration of the relevance to WHM.

In 1880 the publication of Charles Darwin's 'The Power of Movement in Plants' ended with the following assertion: 'It is hardly an exaggeration to say that the tip of the radicle . . . having the power of directing the movements of the adjoining parts, acts like the brain of one of the lower animals; the brain being seated within the anterior end of the body, receiving impressions from the sense organs and directing the several movements' (Darwin, 1880, p573). In a talk attended by Leonard Bastin, Darwin is reported as saying 'we must believe that in plants there exists a faint copy of what we know as consciousness in ourselves' (Bastin, 1908, p551). Bastin goes on to say that 'In origin the animal and vegetable worlds appear to be indivisible, as though we may not dare to say that the plant is an intelligent being. There seems to be a field for a great deal of research, the opening up of which will form a new and fascinating branch of botanical study' (p558). However, it would be over a century before Darwin's seed and Bastin's hope were to produce visible, if contested, fruit.

Trewavas (2015), a major figure in the development of contemporary ideas around plant intelligence, points to a sentence found in the first book on phytohormones, by Went and Thimann in 1937, as being important for his engagement in the field of plant intelligence: 'However in tropistic movements, plants appear to exhibit a sort of intelligence; their movement is of subsequent advantage to them' (Went and Thimann, cited in Trewavas, 2015, p349). For Trewavas, 'advantage' implies both life-cycle assessment and decision-making, attributes not normally considered in plant studies.

The quote from the world's most famous scientist, and possibly the other from a book on plant hormones, may have been important for what eventually became known to some as 'plant neurobiology'. However, it is also true that Darwin's sentence was not taken seriously for over a century, and Went and Thimann's statement was not engaged with for 70 years, suggesting the continued marginalization of plants in the Western tradition.

This marginalization of plants is a result of the impulse to keep kingdoms hierarchically separate. The fear of applying frameworks, such as of signaling, behaviour and intelligence to the plant kingdom that are normally the province of animal and human studies is suggestive of the placement of plants as separate from and subordinate to those who more visibly move, communicate, organize and act.

This fear of crossing boundaries may be seen in the response of the plant science community to the publication of popular texts and also to its own research. In a review of recent developments in plant science, Pollan (2013) reports a plant scientist from Tel Aviv University, Daniel Chamovitz, as suggesting that a popular book, 'The Secret Life of Plants' by Tompkins and Bird (1973), hindered research on plant behaviour. Chamovitz argues that, in addition to questionable methods reported in some of the experiments, the book made what were seen as unacceptable New Age connections between human and plant senses. The result of these concerns was that plant communication and plant behaviour became research areas to be avoided by scientists seeking credibility. Plant scientist James Cahill, of the University of Alberta, notes

in an interview (Ehrlich, 2010), that in the 1970s and 1980s there was research that showed that trees could communicate with one another, but that this led to anthropomorphizing headlines, such as 'The Talking Trees' in non-academic press which, along with some flaws in the initial data and scientific jealousy, led to attacks on these studies. In a cultural space that separates the plant and animal kingdoms so definitively and hierarchically, 'anthropomorphizing' comes to mean the 'unjustified' attribution of human characteristics to non-humans and leaves little room for thinking beyond an anthropocentric view of the world.

However, by the mid 1980's the awarding of the Nobel Prize to plant biologist Barbara McClintock suggested that things were changing. In her acceptance speech, referring to plants, McClintock said that 'A goal for the future would be to determine the extent of knowledge the cell has of itself and how it utilizes this knowledge in a thoughtful manner when challenged' (Trewavas, 2005, p 401).

It is often argued that it is plants' lack of movement that has made their behaviour and intelligence less visible. It is only this side of the millennium that sufficient momentum has gathered such that research in and around plant intelligence is questioning the historical conservatism of the plant sciences. The fact that there is a debate at all signals a sea change.

Since the millennium, academic debate on plant intelligence, sometime under the moniker of 'plant neurobiology', has been increasing. Claims are made that plants exhibit intelligent behaviour and have internal regulatory and control structures that function in similar ways to neuronal systems from the animal kingdom (Garzon and Deijzer, 2011). Such claims are often responded to with vociferous counter claims among the pages of journals.

Trewavas (2005) argues that it is phenotypic plasticity, rather than movement, that allows plants to exhibit intelligence. Thus plants are capable of sensory perception, self-recognition, information processing, learning, memory, choice, decision-making, foresight, control of their behaviour and resource sequestration with minimal outlay. Furthermore, it is in competitive 'foraging' for resources that these signs of intelligence

may be discerned. 'Foraging' is a concept that has only been applied in the animal literature until recently. Of possible interest to herbalists may be Cahill's observation (Karst *et al.*, 2012) that this applies to *Achillea millefolium*, a popular medicinal herb, in that its roots travel faster through low quality rather than high-quality environments.

Trewavas (Narby, 2006) is arguably one of the most enthusiastic advocates of plant intelligence and suggests that, as well as making decisions and computing their complex environment, that plants also have intentions. Narby (2006) describes the case of Ground Ivy and gives Trewavas' interpretation. Ground Ivy is a perennial weed that moves over the ground as a vine. It has been tested in a controlled environment and the plant showed that it was able to sense resources by growing roots earlier in its development in the sites that were nutrient-rich, and skipping over the nutrient-poor sites. Narby reports Trewavas as saying that, in the case of Ground Ivy it is 'difficult to avoid the conclusion of intention and intelligent choice' (Narby, 2006, p86).

Cahill (Ehrlich, 2010) describes how similar experiments in the 1990s, that looked at root growth in relation to nutrition sources, when written up in journals, used the word 'plasticity' rather than 'behaviour', since 'behaviour' was felt to be an inappropriate term to apply to plants.

However, Cahill says that 'eventually it was clear that plants did exhibit behaviour and the detractors just got worn down.'

The Society for Plant Signaling and Behavior established its journal in 2006. One of its objectives is to provide 'a forum for the integration of molecular biology with physiology, phenomenology, and behavior of individual organisms, up to the system analysis of whole plant societies and ecosystems. This integrative view will allow our understanding of communicative plants in their whole complexity.' (Plant Signaling and Behavior, 2015).

The positing of plant neurobiology as a field of endeavor was too much for some plant scientists. Pollan (2013) points out that Amedeo Alpi and 35 other scientists responded with a letter in Trends in Plant Science opposing the concepts of plant neurobiology and plant intelligence. The letter stated that the proponents of plant neurobiology 'have suggested

that higher plants have nerves, synapses, the equivalent of a brain located somewhere in the roots, and an intelligence' (Alpi *et al.*, 2007, p135). However, Trewavas (2007), in a subsequent issue of the same journal, argues that Brenner and his colleagues did not make such claims as to the existence of these tissues. Instead, Trewavas argues that 'plant neurobiology is a metaphor' and that 'the value of metaphors resides in the experimental questions thrown up that may not be immediately obvious in their absence' (p231).

Corrello (2012) suggests that plant science work that characterizes plants as exhibiting prospective, retrospective and flexible behaviour that is guided by meaning has led to three different reactions from the scientific community: the search for plant neurobiological mechanisms that are assumed to be required for intelligent behaviour; denial that plants are intelligent because they do not have nervous systems; and the search for other explanations that do not require invoking a nervous system. The first two reactions limit the possibilities that may be found. The third reaction is more risky but likely to bear more fruit.

Michael Marder (2013c), a philosopher addressing the historical and contemporary place of plants, suggests that while memory has been the focus of many studies looking at intelligence and behaviour in plants, that the concept of 'attention' brings the present back into view and holds the potential for becoming a key building block in this area of research.

Writing within the journal 'Plant Signaling and Behaviour', Marder argues that attention is 'a feature of intelligent conduct in the present' (p1). He suggests that there are three complementary and related definitions of attention: as 'selectivity', for example, seen in plant foraging behaviour; as 'modulation', which Marder describes as 'a chain of focusing-defocusing-refocusing' (p2) required by the plant organism to respond to its environment; and as 'perdurance', seen in the orientation towards a future goal such as germination or flowering.

We shall now look at some specific examples of these developments within plant science, before considering how these may be of relevance to WHM. Cahill, in an interview (Ehrlich, 2010) says that 'We already know that plants communicate with insects using chemicals....'. He

describes how some plants respond to predation: 'Certain plants, when they get attacked by an insect, will purposefully alter their scent, and the alterations they make to their smell will actually attract the predator of the insect attacking it.' However, plants also respond to human visitation. For example, simply touching plants once per week influenced the intensity of herbivory experienced by six plant species in a community (Cahill *et al.*, 2001).

Chamovitz (2013) compares the human experience of sight, smell, touch, hearing, awareness of location, and sense of memory, with that of analogous physiological and chemical reactions in plants. For example plants can distinguish between lights of different colours and they also know when they are being touched. They are aware of aromas, and can sense gravity via specialized cells that function similarly to human inner ears such that the roots can sense which way is up and which way is down. If a Willow is damaged by tent caterpillars the tree releases a chemical cloud that nearby Willows sense or 'smell' and respond to by building up toxic chemicals in their leaves. Some plants can 'remember' winter, with the passing of winter triggering blossom. If you touch the branches of a beech tree 'the tree will remember it was touched. But it won't remember you' (p175).

Chamovitz (Cook, 2012), in an interview, expands on plant memory:

'Plants definitely have several different forms of memory, just like people do. They have short-term memory, immune memory and even transgenerational memory! I know this is a hard concept to grasp for some people, but if memory entails forming the memory (encoding information), retaining the memory (storing information), and recalling the memory (retrieving information), then plants definitely remember. For example a Venus Fly Trap needs to have two of the hairs on its leaves touched by a bug in order to shut, so it remembers that the first one has been touched. But this only lasts about 20 seconds, and then it forgets. Wheat seedlings remember that they've gone through winter before they start to flower and make seeds. And some stressed plants give rise to progeny that are more resistant to the same stress, a type of transgenerational memory that's also been recently shown

also in animals. While the short term memory in the Venus Fly Trap is electricity-based, much like neural activity, the longer term memories are based in epigenetics — changes in gene activity that don't require alterations in the DNA code, as mutations do, which are still passed down from parent to offspring.'

Chamovitz (Cook, 2012) sees the complex sensory mechanisms of plants as arising from their 'rootedness' i.e. they can't walk away from a difficult environment. These mechanisms allow them to survive in difficult or changing environments. '...plants are immobile. They need to see where their food is. They need to feel the weather, and they need to smell danger. And then they need to be able to integrate all of this very dynamic and changing information.'

Hearing is the sense for which Chamowitz finds least analogous evidence. However, Pollan (2013) reports viewing a time lapse video shown to him by Stefano Mancuso, a Professor of plant science at the University of Florence, showing a young bean plant placed a few feet away from a metal pole on a dolly. Pollan suggests that the video 'seems to show' that the plant 'knows' exactly where the pole is a long while before it makes contact with it. Mancuso raises the possibility that the plant could be using a form of echolocation, with the clicking sound source arising from cells as they elongate.

Another aspect of plant behaviour is discerned in the possibility of kin recognition. Dr Susan Dudley (Dudley and File, 2007; Cossins, 2014) of McMaster University in Ontario, Canada, showed that a beach weed called sea rocket (*Cakile edentula*) could sense whether it was growing with siblings or unrelated plants of the same species. Allocation of resources to roots increased when placed in pots with stranger plants, but not when groups of siblings shared a pot. It was suggested that root interactions provide the cue for kin recognition.

Suzanne Simard, (Simard 2009, 2012a, 2012b), Professor of forest ecology at the University of British Columbia, has found that the forest shares its resources. Using radioactive isotopes injected into Douglas firs

she found that these trees provide carbon-based food to young fir seedlings and to fungi via underground mycorrhizal fungal networks that connect the trees' roots. In return these networks provide the trees with nutrients. Simard, in an interview (Pollan, 2013) describes the oldest trees functioning as the most active 'hubs', branching their connections out to more trees than the younger trees. These 'mother trees' were able to deliver nutrients to shaded seedlings that included their offspring, until they grew enough to access light. However, not only did the evergreen firs communicate with their own species but they exchanged nutrients with deciduous Birch trees, lending them sugars when they had a surplus and receiving sugars back at a later date. These arrangements led to more robust and resilient health of the forest as well as a larger total volume of photosynthesis.

We will now turn our attention to three key points made by Pollan (2013) in his assessment of the emerging field of plant neurobiology and its willingness to engage with concepts of behaviour, communication and intelligence. Firstly, the controversy within plant sciences is more about the interpretation and naming of discoveries, rather than the validity of the data itself. The questions that stir up the most heated debates include whether plants can 'learn', 'remember' and 'make decisions', or whether these words should be 'reserved for creatures with brains.' However, the possibility that plants do have these faculties and abilities is relevant for WHM in that it takes plants one step closer to being seen as able to interact with agency with other species, including humans. The second point is that while this field seems new, Pollan points out that plant neurobiologists look as far back as Darwin's "The Power of Movement in Plants", as we have seen above. Others (e.g. Stahlberg, 2006) point to the importance of the first recordings of action potentials in *Dionea* and *Mimosa* plants, also at the end of the 19th Century. The 135 year old origins of plant neurobiology within the work of the world's most famous scientist at least points to the possible placement of plant intelligence, and even the enchanting effect of herbs on herbalists, within a long, if interrupted, history.

The third point that Pollan makes is that intelligence can be defined in two ways. It can be seen as requiring a brain, from which reason, judgment and abstract thought arise. However, intelligence can also be seen as 'less brain-bound and metaphysical', and instead a behavioral definition can be emphasized, with intelligence being the 'ability to respond in optimal ways to the challenges presented by one's environment and circumstances'. Unsurprisingly plant neurobiologists are drawn to this second definition. Re WHM and the enchanted crossing of herbalists and herbs, if intelligence can come to be seen as less brain-bound, then this leaves open the possibility of herbal and human intelligence meeting. Recent developments in understanding both the human enteric nervous system and the 'heart brain' also signal a move to seeing intelligence not located solely above the neck.

To summarize, plant neurobiology, or plant signaling and behaviour, is a contested but visible branch of plant sciences. If plants, through physiological mechanisms analogous to the human senses, or through other, as yet unexplored mechanisms, are capable of self-recognition, learning, remembering, communicating, making decisions, resource sequestration, processing and sharing information and resources, then they can be seen as having the ability to be aware of and respond to the challenges of the environment and of circumstances. Plants can then be seen as possessing an intelligence that guides their interactions in the world, suggesting that they have more agency than has been previously perceived.

One definition of agency is the 'manifest capability of all organisms to exhibit some degree of autonomy and control in their encounters' (Turvey and Carello, 2012 cited in Carello *et al.*, 2012, p245). The research into plant intelligence and behaviour described above may be seen as supporting the possibility of plant agency and is a step towards plant-human (including plant-herbalist) communication, being taken seriously by science.

Making room for non-humans (and even plants) in the social sciences

It was suggested above that there are signs of change within plant science that point to ways of relating plant physiology to spheres of interest that have previously been restricted to animal and human sciences, namely behaviour and communication. There are also signs of change in the social sciences. These signs suggest that non-humans, including plants, are being taken increasingly seriously, and that the possibility exists of non-hierarchical relationships between humans and other actors.

Posthumanism, an ontological turn and Haraway

Descola (2014) refers to posthumanism as ‘the project of repopulating the social sciences with nonhuman beings and thus of shifting the focus away from the internal analysis of social conventions and institutions and toward the interactions of humans with (and between) animals, plants, physical processes, artifacts, images, and other forms of beings....’ (p268). Descola suggests that this has two intellectual lineages. The first lineage originates with Science and Technology Studies in general, and Actor-Network Theory in particular, and seeks to ‘strip humans of their hegemony as social agents’ (p268). Descola traces the second lineage back to Levi-Strauss and the ambition to avoid ‘some of the great anthropological dualisms – nature and society, individual and collective, body and mind’ (p268), while also maintaining that differences can be meaningfully organized. These two lineages that led to posthumanism have also been instrumental in the ‘ontological turn’ that is particularly present in anthropology, and which seeks to decentre Western understandings in order to reinvigorate its own intellectual project. An ontological approach recognizes the existence of multiple worlds (Palecek and Risjord, 2012), and was itself partly a response to the ‘writing culture’ turn of the 1980s, initiated by Clifford and Marcus (1986), which sought to describe multiple cultural representations of a single reality.

In these posthuman and ontological understandings the human species is not placed above non-human species, but rather different species are amongst each other, in opposition to traditional humanistic hierarchical values.

Braidotti (2013) explores some of the trajectories that have led to posthumanism, including humanism, anti-humanism and post-secularism. For Braidotti it all started with “He: the classical ideal of ‘Man’, formulated first by Protagoras as ‘the measure of all things’...and represented in Leonardo da Vinci’s Vitruvian Man” (p13). Braidotti argues that, in this particular model of human perfectionism, humanism has limited what counts as human. For Braidotti, posthumanism functions to explore alternative ways of thinking about the human subject. One such way is through ‘the non-human, vital force of Life, which I have coded as zoe’ (p60). Braidotti goes on say that, ‘Zoe as the dynamic, self-organizing structure of life itself.....stands for generative vitality. It is the transversal force that cuts across and reconnects previously segregated species, categories and domains’ (p60). For Braidotti, such an approach looks to identify and create enhancing connections between all that lives, whether it breathes or not, which necessarily challenges the primacy of the male subject and his human and other-than-human objects.

Braidotti’s work on the concept of zoe is not far from Narby’s (2006) attempt to rethink the meaning of intelligence as a peculiarly human property, which leads him to adopt the Japanese concept of ‘chi-sei’, a ‘knowingness’ that is a pre-requisite for the decision making that all life requires, whether human or not. Narby is an anthropologist and it is not surprising that this discipline, which literally means ‘the study of humankind’ should broaden itself out still further to include other species, even if it has taken rather a long time. This is largely because in its ethnographic methodology, researchers necessarily come into contact with non-humans. However, within anthropology it is interesting to note that animals are more likely to be the non-human actors than plants. Even ‘How Forests Think’ (Kohn, 2013), which draws on four years of fieldwork in Ecuadorian Amazonia amongst the Runa people, shows signs of plant blindness in that it is pretty much devoid of talk of plants

and trees. Instead Kohn prefers to look to non-photosynthesizing creatures such as hunting dogs, jaguars, monkeys and ants to press assumptions about what it is to be human.

Actor-Network Theory and the Writing Culture movement both originated in the mid 1980s and were part of the academic debates and lineage that led either directly or indirectly to considerations of the other-than-human in the social sciences. However, there is another major influence of the same time period that is important for the academic evolution to the posthuman. Donna Haraway's 1985 paper 'A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century', later published in a collection of essays (Haraway, 1991) introduced the metaphor of the 'cyborg' to argue against assumptions of essentialism in feminism and to prompt feminists to engage with technology. Addressing 'the cyborg' drew attention to the blurring of boundaries between the human and the machine in order to enable radical politics. 'A Cyborg Manifesto' ends with the statement 'I would rather be a cyborg than a goddess'. For Haraway, technology breaks down long-standing Western dualisms such as mind/body, male/female and self/other. Instead, we are cyborgs. Her prolific writings have influenced much of social science including cultural studies, women's studies, political theory, philosophy, science and technology studies and anthropology.

In a more recent work (Haraway, 2008), Haraway turns from technology to look at 'companion species', a term which does not refer simply to 'pets' but which suggests that humans and other species are networked into economies, societies, biologies and concepts. She explores our entanglements with 'critters' - 'a motley crowd of lively beings including microbes, fungi, humans, plants, animals, cyborgs and aliens' (p330). While Haraway's concern is more about dogs than other species, and less about plants than other critters, at least it leaves the window open for a creeping vine to find a way in.

In an interview (Haraway, 1999) with Thyrza Nichols Goodeve (TNG), Haraway (DH) gives her most direct reference to the place of plants in her intellectual history and vision:

TNG: Experientially speaking, what is your most profound moment of encountering what is called 'cyborgology' in *The Cyborg Handbook*, or what we might call 'cyborgness'?

DH: Oy vey! (laughter)

TNG: Or what are the moments when you remember it crystallizing for you?

DH: Well, one is certainly my sense of the intricacy, interest, and pleasure – as well as intensity – of how I have imagined how like a leaf I am. For instance, I am fascinated with the molecular architecture that plants and animals share, as well as with the kinds of instrumentation, interdisciplinarity, and knowledge practices that have gone into the historical possibilities of understanding how I am like a leaf (p131).

Plant Persons and Plant Thinking

While the above does not amount to a Japanese Knotweed-like invasion of plants into the social sciences, there are two authors who have chosen to look specifically at plants rather than more generally at the non-human. The first looks at 'plant persons' and the second at 'plant thinking'.

Hall (2011), in an attempt to urge a reconsideration of the moral and ethical standing of plants, has adopted the concept of 'plant personhood', derived from the work of animist scholars such as Graham Harvey and Irving Hallowell. In this approach, plants, as 'other-than-humans', are related to as persons. Human interactions with plants are seen in terms of kinship links and relationships between persons. Hall quotes Harvey who describes animists as 'people who recognize that the world is full of persons, only some of whom are human, and that life is always lived in relationship with others.' (Harvey, 2005, cited in Hall, 2011, p105). Hall suggests that viewing plants as persons allows the 'voices' of non-humans to be heard.

Plant personhood is not concerned with anthropomorphizing, with projecting human-like qualities onto plants. Plants are seen as living beings with their own perspectives and modes of communication. For Hall, 'Personhood thus emerges from a focus on relating and the recognition of shared volition and intentionality in natural beings' (p106). Furthermore, this understanding of plants as persons must be learned,

there is no genetic determinism here and even the transmission of ancestral knowledge and wisdom can only play a supportive role to the active learning that is required.

Drawing on the philosophical ecology of Kohak, Hall urges us to develop 'manners of speaking' that are 'modes of interacting with reality which render our world meaningful and guide our actions therein' (p158). Plant personhood may be seen as part of this project.

Marder (2013a) also demands that the usually human-centred or zoo-centric understanding of ethical awareness be expanded to consider plants. Like Hall, he argues that the perception of plants as intelligent living beings is not an attempt to anthropomorphize the plant kingdom, which would in fact only serve to reinforce anthropocentrism. For Marder, seeing plants as intelligent is to argue that all life (or all 'critters' as Haraway might say) has to respond to its circumstances, and that this challenge breeds both similarities and differences. He writes: "The sensitivity of the roots seeking moisture in the dark of the soil, the antennae of a snail probing the way ahead, and human ideas or representation we project, casting them in front of ourselves, are not as dissimilar from one another as we tend to think" (p27).

While similarities exist, Marder argues that awareness of the differences between humans and plants can be useful for forging enhancing links between the two. These differences arise partly from plants' lack of locomotion that requires them to change their state rather than their location in response to the challenges that they face. Marder (2013) introduces the concept of 'plant thinking' as referring primarily to the 'non-cognitive, non-ideational, and non-imagistic mode of thinking proper to plants (hence what I call 'thinking without the head')' (p10). In order to understand plant-thinking Marder looks to the principles of plant anatomy, including their apparent emphasis on what is above ground, rather than underneath it, their lack of a centre and their sensitivity to their others that live nearby. These can be seen as physical signs of plant thinking. The thinking of 'vegetal life' can also be understood through the relationship of plants to time, with plants being under the influence of the seasons as well as following temporal cycles of

reproduction. Another aspect of plant thinking is ‘non-conscious intentionality’ (Marder, 2013a, p153). Marder describes the non-intentional life as not being directed towards itself and says that ‘something of this non-intentionality is present in the plant, which boasts neither a self to which it could return, nor a fixed, determinate goal or purpose that it should fulfill’ (p153). Plant thinking is ‘thinking before thinking’. However, for Marder (2013b), plant-thinking also refers to ‘how human thinking is, to some extent, de-humanized and rendered plant-like, altered by its encounter with the vegetal world’ (p124). He sees ‘vegetal existence’ as deconstructing the dichotomies of traditional human metaphysics – e.g. between the ‘soul’ and ‘body’ of the plant; depth and surface; self and other; one and the many; and life and death. Maybe it is this that enchants some herbalists and allows WHM to easily syncretize diverse influences.

Western Herbal Medicine: looking forward

The majority of the cases in this thesis show that herbalists’ thinking and practices owe at least something, if not much, to their enchanting encounters with ‘the vegetal world’ of plants and herbal medicines. The arguments of this thesis have not been made before, partly because narrative methods have not been included in the limited social science research into WHM. However, the arguments are also novel because herbalists’ stories, including their entryways and how they relate to the rest of their narratives and to WHM, are hidden in the shadows of modernity’s demand for the disenchanting separation of the human from the non-human, including the herbalist from the herb. Herbs have been argued to be the convivial tools of herbalists. The possibility has been left open that herbalists may also be the convivial tools of herbs. This provocative position finds some resonance with recent developments in plant and social sciences, where the agency and intelligence of plants are being considered.

The profession, on the other hand, as seen in the professional associations’ engagement with the politics of healthcare and the academic science based curricula, does not openly acknowledge the

enchanting side of herbal medicine. While the relative importance of enchantment is unknown within WHM in the UK, one reason for the lack of visible attention that it has been paid is likely to be due to the profession's aim of seeking political and legal recognition that would likely not be advanced by such an admission.

This striving for political recognition goes back at least 150 years to the establishment of what would become the NIMH. As has been described above, fifteen years ago this process accelerated when the House of Lords (2000) report suggested that statutory regulation of herbalists should go ahead due to the existence of a 'credible' evidence base, an organized profession and a risk to the public of unqualified practitioners. However, very recently the latest government working group report (Walker, 2015) stated that the evidence base is not substantial enough to justify statutory regulation and the matter appears, for now at least, to be closed.

The cases and discussion presented in this thesis raise questions for the profession as a whole. Should the narratives and their implications be taken up and considered? Or do they represent a threat to the progress made so far towards political recognition. If they are taken up and considered, would it then be of benefit to form alliances with emerging developments, such as those seen in plant sciences and in social sciences, in order to create additional supportive and exploratory networks for WHM?

Appendix 1: BC on Gallant Soldier

‘One of my most fun visits with a plant was with Gallant Soldier (or perhaps it was Shaggy Soldier...anyway, one of the Galinsogas). I had noticed this pretty cheerful little daisy around the streets.....when I was training, and no-one knew what it was. The more I looked at it, the more I noticed it. As a daisy, it has that cheerful nodding friendliness I associate with that branch of the family. It seemed to be everywhere, hugging the bottom of the wall at every turn..... I eventually identified it by name, but there seemed to be nothing at all soldier-ish about it, so I was intrigued - apparently the name is a mishearing of Galinsoga... gallant soldier.... Well I took some from a warm wall and sat down to Journey with it, stating my intention to travel to the Otherworld to meet the Spirit of Gallant Soldier, to learn from it and to return safely to Middle Earth I walked across an open sunny field, and through a gate into a sun-dappled woodland. I walked along the path, enjoying the breeze and the plants all around me. The birds were singing at a distance, and the smell of the earth came up to me in the warmth of the afternoon. I entered the clearing, which was very large, unusually large.

The grass was golden in the sunlight and the air was still even as the breeze moved the trees. I stood at the edge, taking a look around, gauging the size of the clearing and wondering if the Plant would make itself known, or if I would have to wait, or if I would have to go further to find it. There was a patch of deeper lush grass in the middle of the clearing, and what looked like the trunk of a large dead tree. It was warm and quiet, delightful. The breeze rustled in the boughs, and there were clouds of small flying insects dancing in the sunlight. The shadows at the edges of the clearing were swelling and waving as the breeze moved through the trees. I thought "Well, this is lovely!" I felt relaxed and happy. I couldn't see anything that might be the Spirit of the plant, so as I stood there looking around I called out "Ho! I have come to meet with the Spirit of Gallant Soldier, if I may." Ahead of me, in the middle of the clearing, the large tree trunk lifted its head and resolved into a moose. He turned his head to look at me over his shoulder in a relaxed and

disinterested way, and went back to grazing. His enormous antlers looked very heavy and powerful, but they seemed to float above his head, perfectly balanced.

Now I know nothing at all about moose: how big is it really? Does it live in the trees or the open? I have no idea, really. I was looking for the plant, but I was seeing a moose. I called for the Plant again, but there was no response, only the moose looking at me with something approaching idle curiosity. "Well" I thought. "Maybe Gallant Soldier isn't interested in accepting my invitation: fine. But here is Moose, so maybe I'll go over and say hello. Maybe as I'm walking over, I'll see Gallant Soldier growing somewhere, or it will make itself known". So I walked across the clearing, clicking my tongue and saying "Ho Moose, merry meet! May I approach?"

Moose said "Um, sure, yeah". So relaxed, so chilled out. Like a confident stoned teenager. Well I asked if I could ask questions, and Moose said "Yeah, sure, why not." So I was diligent and tried to learn and understand Moose. Moose was giving me simple true one-word answers, and I saw that while he was being very patient, he was puzzled at my busyness and urgency. So I just stood and looked at him. He was not especially beautiful, his fur was kinda mucky and coarse, not smooth, maybe moulting, certainly patchy. A beautiful brown. His head was longer and narrower than I would have imagined, more like a tube than a solid squarish cow-like face. The velvet on his antlers looked soft and fuzzy, and the streaky horny parts looked like angel wings spreading outwards. I was suddenly astonished at how huge they were. I had established that Moose spends time in amongst the trees of the deep greenwood as well as in the clearings, and I thought about how tricky it would be to negotiate between the trees with those enormous antlers. I said "How do you move between the trees?!" and moose looked at me and shrugged and said "I get by".

This casual insouciance really struck me. It was really a "no worries" attitude. Moose invited me to stay beside him while he rested. He lay down in the sunshine to chew the cud (I later discovered that Moose is indeed a ruminant. I admit to some degree of worry when I came back

and thought I wonder if Moose really is a ruminant... I have no idea, I hope it is, I hope it's somehow proof that real true information can be gained in the Otherworld in this way). My habitual sense of awe and respect for Beings in the Otherworld seemed utterly ridiculous here with Moose in the sunshine, so I leaned against his warm flank in the warm sunshine. We sat there for a long time, dreaming in the sunshine together. I could smell him, and hear the gurgling of his various bellies, and feel them sometimes against my own back, and sometimes he belched and his flank would leap briefly under me. Flies buzzed at him, but a quick flick of the ears or twitch of the skin was enough to send them off.

We were both perfectly aware of each other, but perfectly unbothered by each other. I was learning more about Moose by simply sitting with him than I possibly could by asking, asking, asking. I was sitting in the circle of his own experience, and looking outward, as if I was myself somehow Moose. My mind and body relaxed, I was simply a Being in the woods. I could have stayed there forever. Once my mind had settled and relaxed and spread out, I remembered that I had come with the intention of speaking with Gallant Soldier. I mentioned this to Moose. I sensed his attention, but he made no response, just continued chewing the cud and looking ahead.

And then, as you have no doubt already guessed, I realized that this moose was the Spirit of Gallant Soldier: strong, relaxed, confident, friendly and open, not a showoff, simply strong and powerful in it's own right.

I realized that Moose - or rather, Gallant Soldier - would sit there with me forever, and it was up to me to decide to leave, or to stay. Well, of course I had to leave, so with determination and reluctance, I stood up and said my farewells. Gallant Soldier was of course as unfazed by my departure as he was by my arrival. I said my thank-yous, and asked what I could do in return for his hospitality, and he said "Well, tell the people about us, alright?".

And I turned and walked out of the sunny clearing, and along the woodland path, and out the gate, and across the open field, and back in

to my body.

Now that utterance - "I get by" - has become a kind of mantra for me. However tricky or challenging things seem to be, if I remain relaxed and gracious and unfazed, I'll find a way through: or more than that, the way through will become clear and open. There was something really clown-like and funny about the whole encounter, and when I see the plant growing, I always feel like laughing.

I have since learned that Galinsoga is native to Mexico, has colonised elsewhere (it is known as Kew Weed 'cos it escaped from the botanical gardens), is used in some Mexican cooking, has some fairly predictable medicine (cuts and bruises, some antimicrobial activity, astringent). But why it appeared to me as Moose... well, I can only suppose that's because Moose somehow most embodies its energetic properties. I once asked a Canadian friend about the nature of Moose, and she told me they are notoriously bad tempered. Well my moose was very even tempered; but I suppose I can imagine that kind of self-sufficient indifference might become irritation when thwarted.'

References

- Abram, D., (1997). *The Spell of the Sensuous*. London: Vintage.
- Adams, V. *et al.*, (2010). *Medicine between science and religion*. Oxford: Berghahn Books.
- Alpi, A. *et al.*, (2007). Plant neurobiology: no brain, no gain? *Trends in plant science*. **12** (4), 135-136. [online]. Available from: Science Direct. <<http://www.sciencedirect.com>> [Accessed 10 January 2015].
- Angus, I., (1983). Disenchantment and modernity: the mirror of technique. *Human Studies*. **6**, 141-166. [online] Available from: Jstor. <<http://www.jstor.org>> [Accessed 3 July 2013].
- Appadurai, A., (1988). *The social life of things: commodities in cultural perspective*. Cambridge: Cambridge University Press.
- Attala, L., (2014). *Conversations over dinner*. Botanical Ontologies Conference, Oxford University. 17th May 2014. [online]. Available from: Academia.edu. <<http://www.academia.edu>> [Accessed 12 March 2015].
- Backman, L. and Hultkrantz, A., (1978). *Studies in Lapp Shamanism*. Stockholm: Almqvist and Wiksell International.
- Barker, J., (2001). Principles and Practice of Phytotherapy: Modern Herbal Medicine. Book Review. *British Journal of Phytotherapy*. **5** (3). 155 – 157.
- Barker, J., (2007). *History, Philosophy and Medicine: phytotherapy in context*. West Wickham: Winter Press.
- Barker, J., (2012). The ethnographic interview in an age of globalization. In: Fardon *et al.* *The SAGE handbook of social anthropology, vol 2*. London: Sage Publications, 54 – 68.
- Barnes, L., (2009) Practitioner decisions to engage in Chinese Medicine: cultural messages under the skin. *Medical Anthropology: cross cultural studies in health and medicine*. **28** (2), 141 – 165. [Online] Available from: Taylor and Francis. <<http://www.tandfonline.com>> [Accessed 12 November 2012].
- Bastin, L., (1908) The Intelligence of the Plant. *Pall Mall magazine*. **42** (187), 550 – 558. [online] Available from: ProQuest. <<http://www.proquest.com>> [Accessed 5th August 2015].
- Bennett, J., (2001). *The Enchantment of Modern Life: Attachments, Crossings and Ethics*. Princeton: Princeton University Press.

- Berman, M., (1981). *The Reenchantment of the World*. London: Cornell University Press.
- Bold, C., (2012). *Using narrative in research*. London: Sage Publications.
- Bone, K., (2003). *A clinical guide to blending liquid herbs: herbal formulations for the individual patient*. London: Churchill Livingstone.
- Bone, K., (2013). An evening with Mills and Bone. Recording of talk given by Simon Mills and Kerry Bone. Tuesday 16th April. The Pullman Brisbane QLD 4000. Available from: Integria Healthcare. <<http://www.integria.com>>
- Bone, K. and Mills, S., (2013). *Principles and Practice of Phytotherapy: Modern Herbal Medicine. Second Edition*. London: Churchill Livingstone.
- Braidotti, R., (2013). *The Posthuman*. Cambridge: Polity Press.
- Brenner, E. *et al.*, (2006). Plant Neurobiology: an integrated view of plant signaling. *Trends in Plant Science*. **11** (8), 413 – 419. [online]. Available from: Science Direct. <<http://www.sciencedirect.com>> [Accessed 10 January 2015].
- British Herbal Medicine Association., (1983). *British Herbal Pharmacopoeia*. Bournemouth: British Herbal Medicine Association.
- British Herbal Medicine Association., (1992). *British Herbal Compendium*. Guildford: British Herbal Medicine Association.
- British Herbal Medicine Association (1996)., *British Herbal Pharmacopoeia*. Guildford: British Herbal Medicine Association.
- Braun, SB., (2011). *Neo Shamanism as a healing system: enchanted healing in a modern world*. Ann Arbor MI: ProQuest.
- Braun, V. and Clarke, V., (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*. **3** (2), 77 – 101. [online] Available from: Taylor and Francis. <<http://www.tandfonline.com>> [Accessed 12 February 2012].
- Braun, V. and Clarke, V., (2013). *Successful qualitative research*. London: Sage Publications.
- British Journal of Phytotherapy* (1990). **1**. Bodle Street Green: College of Phytotherapy.
- Bron, A. and West, L., (2000). Time for stories: the emergence of life history methods in the social sciences. *International Journal of Contemporary Sociology*. **37** (2), 158 – 175.

Brown, P.S., (1982). Herbalists and medical botanists in mid-nineteenth – century Britain with special reference to Briston. *Med His.* **26**, 405 – 420. Online. Available from: Pubmed Central. <<http://www.ncbi.nlm.nih.gov/pmc/>> [Accessed 1 October 2012].

Brown, P.S., (1985). The vicissitudes of herbalism in the late nineteenth – and early twentieth century Britain. *Med His* Jan 1985 **29** (1), 71 – 92. Online. Available from: Pubmed Central. <<http://www.ncbi.nlm.nih.gov/pmc/>> [Accessed 1 October 2012].

Burns Lingard, W., (1958). *Herbal Prescriptions from a Consultants Casebook*. National Institute of Medical Herbalists.

Caldecott, T., (2008). The History of Physiomedicalism. [online] Available from: Todd Caldecott. <<http://www.toddcaldecott.com>> [Accessed 10th January 2010].

Cahill, J.F. *et al.*, (2001). The herbivory uncertainty principle: visiting plants can alter herbivory. *Ecology.* **82** (2). 307 – 312. [online] Available from: Jstor. <<http://www.jstor.org>> [Accessed 23 June 2015].

Callon, M., (1986). Some elements of a sociology of translation: domestication of the scallops and the fishermen of Saint Brieuc Bay. In: *Law, J., (ed) Power, Action and Belief: a new sociology of knowledge?* London: Routledge and Kegan Paul.

Canguilhem, G., (1989). *The Normal and the Pathological*. New York: Zone Books.

Cant, S. and Sharma, U., (1999). *A New Medical Pluralism? Alternative Medicine, Doctors, Patients and the State*. London: UCL Press.

Carsten, J., (2012). Fieldwork since the 1980s: total immersion and its discontents. In: Fardon et al. *The SAGE handbook of social anthropology, vol2*. London: Sage Publications, 7 – 20.

Cascardi, A.(1992). *The Subject of Modernity*. Cambridge: Cambridge University Press.

Casey, M., (2009) *The practice of Western Herbal Medicine in Australia*. PhD thesis. [online] Available from: The University of Newcastle's Digital Repository. <<http://www.ogma.newcastle.edu.au>> [Accessed 3 November 2011].

Chamovitz, D., (2013). *What a Plant Knows*. Oxford: One World Publications.

Clifford, J. and Marcus, G.E., (1986). *Writing Culture: the poetics and politics of ethnography*. Berkeley: University of California Press.

Colquhoun, D., (2011a). *Herbal medicines fail test*. [online] Available from: <<http://www.dcsience.net/2007/10/04/herbal-medicines-fail-test/>> [accessed 13 Feb 2015].

Colquhoun, D., (2011b). Why does the MHRA refuse to label herbal products honestly? Kent Woods and Richard Woodfield tell me. 1st April 2011. [online]. Available from: DC's improbable science. <<http://www.dcsience.net>> [accessed 21 Feb 2015].

Conway, P., (2010). *The Consultation in Phytotherapy*. London: Churchill Livingstone.

Cook, G., (2012). Do plants think? *Scientific American*. [online]. Available from: Scientific American. <<http://www.scientificamerican.com>> [Accessed 14 April 2015].

Cook, W., (1998 [1869]). *The Physio-Medical Dispensatory*. Oregon: Eclectic Medical Publications.

Corrello, C. et al., (2012). Unnerving Intelligence. *Ecological Psychology*. **24** (3), 241 – 264. [online] Available from: Taylor and Francis Online <<http://www.tandfonline.com>> [Accessed 10 April 2015].

Cossins, D., (2014). Plant Talk. [online] Available from: *The Scientist Magazine*. [online]. <<http://www.the-scientist.com>> [Accessed 3 April 2015].

Darwin, C., (1880) *The Power of Movement in Plants*. [online]. Available from: The Free Information Society. <<http://www.freeinfosociety.com/media/pdf/4790.pdf>> [Accessed 28 April 2015].

Crellin, J. and Philpott, J., (1997). *Trying to Give ease: Tommie bass and the story of herbal medicine*. Durham: Duke University Press.

Daston, L. and Galison, P., (2010). *Objectivity*. London: Zone Books.

Dawkins, R., (1988). *Unweaving the rainbow: science, delusion and the appetite for wonder*. London: Penguin.

Deleuze, G. and Guattari, F., (2004). *A Thousand Plateaus: Capitalism and Schizophrenia*. London: Continuum Publishing.

Denham, A., (1994). Using herbs responsibly. *European Journal of Herbal Medicine*. **1** (1) Winter, 2 – 7.

Denham, A., (2014). Herbal practice: just how complex an intervention? In: Brice-Ytsma, H. and Watkins, F. (eds). *Herbal Exchanges: in celebration of the National Institute of Medical Herbalists 1864 - 2014*. London: Strathmore Publishing. 57 – 66.

- Denzin, N., (2001). The reflexive interview and performative social science. *Qualitative Research*. **1** (1), 23 – 46. [online] Available from: Sage Publications. <<http://www.sagepublications.com>> [Accessed 14 April 2013].
- Descola, P., (2014). All too human (still). *Journal of Ethnographic Theory*. **4** (2), 267 – 273. [online]. Available from: HAU. <<http://www.Haujournal.org>> [Accessed 1 February 2015].
- DuBois, T., (2009). *An Introduction to Shamanism*. Cambridge: Cambridge University Press.
- Dudley, S. and File, A., (2007). Kin recognition in an annual plant. *Biol. Lett.* **3**, 435 – 438. [online]. Available from: Royal Society Publishing. <<http://www.rsbl.royalsocietypublishing.org>> [Accessed 3 March 2015].
- Durraffourd, C. and Lapraz, J-C. (2002). *Traite de Phytotherapie Clinique*. Paris: Elsevier Masson.
- Durkheim, E., (1984 [1893]). *The Division of Labour in Society*. London: Palgrave Macmillan.
- Durkheim, E., (2006 [1897]). *On suicide*. London: Penguin classics.
- Ehrlich, N., (2010). *Discovering 'The secret life of plants': A Q and A with Dr James Cahill*. [online]. Available from: The National Audobon Society. <<http://www.audobon.org>> [Accessed 5 April 2015].
- European and Traditional Herbal Medicine Practitioners Association., (2007). *Core Curriculum for Herbal and Traditional Medicine*. [online]. Available from: <<http://www.ehtpa.eu>> [accessed 20 March 2013].
- European and Traditional Herbal Medicine Practitioners Association., (2014). *Core Curriculum for Herbal and Traditional Medicine*. [online]. Available from: <<http://www.ehtpa.eu>> [accessed 18 March 2015].
- European Journal of Herbal Medicine., (1994). **1** (1). *Editorial*. National Institute of Medical Herbalists. Exeter.
- Evans, S., (2008). *Changing the knowledge base in western herbal medicine*. *Social Science and Medicine*. **68**, 2098 – 2106. [online] Available from: Science Direct. <<http://www.sciencedirect.com>> [Accessed 23 January 2012].
- Evans, S., (2009). *Challenge, tension and possibility: an exploration into contemporary western herbal medicine in Australia*. Unpublished PhD. [online]. Available from: <http://works.bepress.com/sue_evans/15/> [Accessed 12 December 2011].

- Falzon, M-A., (ed) (2009). *Multi-sited ethnography: theory, praxis and locality in contemporary social research*. Farnham: Ashgate Publishing Limited.
- Fisher, C., (2009). *Materia Medica of Western Herbs*. Nelson: Vitex Medica.
- Fisher, P., (1998). *Wonder, the rainbow and the aesthetics of rare experiences*. Cambridge: Harvard University Press.
- Footler, P., (2015). *Henry VIII and the Art of Herbal Healing*. [online]. Available from: Pharmaceutical Journal. <<http://www.pharmaceutical-journal.com>> [Accessed 20 Feb 2015].
- Foucault, M., (2001). *The Order of things: an archaeology of the human sciences*. London: Routledge.
- Fulder, S., (1996). *The Handbook of Alternative and Complementary Medicine. The most authoritative and complete guide to alternative medicine*. Oxford: Oxford University Press.
- Fuller, S., (2000). *Thomas Kuhn: A philosophical history of our times*. Chicago: University of Chicago Press.
- Fuller, S., (2006). *The Philosophy of Science and Technology Studies*. London: Routledge.
- Gane, N., (2005). *Weber and Postmodernism*. London: Palgrave.
- Garzon, P and Deijzer, F., (2011). Plants: adaptive behavior, root-brains, and minimal cognition. *Adaptive Behavior*. **19** (3), 155 – 171. [online] Available from: Sage Publications <<http://www.adb.sagepub.com>> [Accessed 14 April 2015].
- Goldacre, B., (2015). UCL, Colquhoun, and Dr Ann Walker – a victory for common sense. [online]. Available from: <<http://www.badscience.net>> [Accessed 14 Feb 2015].
- Geertz, C., (1973). "Thick Description: Toward an Interpretive Theory of Culture". In: *The Interpretation of Cultures: Selected Essays*. New York: Basic Books, 3-30.
- Graham-Little, E., (1935). Medical Herbalists. *BMJ*. 13th July 1935, 86 – 87. [online]. Available from: PubMedCentral. <<http://www.ncbi.nlm.nih.gov/pmc/>> [accessed 2 Feb 2015].
- Grieve, M., (1996 [1931]). *A Modern Herbal*. Tiger Books.
- Griggs, B., (1982). *Green Pharmacy*. London: Vicking
- Griggs, B., (1997). *New Green Pharmacy*. London: Vermilion.

Grossberg, L., (2010). Affect's Future: rediscovering the virtual in the actual. In: Seigworth, G. and Gregg, M. (eds). *The Affect Theory Reader*. Durham: Duke University Press. pp 309 – 338.

Guthrie, D., (1961). Plants as remedies: the debt of medicine to botany. *Transactions and Proceedings – Botanical Society of Edinburgh*. **39** (2), 184 – 195.

Hall, M., (2011). *Plants as Persons*. Albany: State University of New York.

Hammersley, M. and Atkinson, P., (2007). *Ethnography*. London: Routledge.

Haraway, D., (1991) "A Manifesto for Cyborgs: Science, Technology, and Socialist-Feminism in the late twentieth century." In: *Simians, Cyborgs, and Women: the Reinvention of Nature*. 149 – 182. London: Routledge.

Haraway, D., (2008). *When species meet*. Minneapolis: University of Minnesota press.

Haraway, D., (1999). *How like a leaf*. London: Routledge.

Hardt, M., (2007). Foreward: What Affects Are Good For. In: Clough, P. and Halley, J. *The Affective Turn: Theorizing the Social*. Durham: Duke University Press. pp ix-xii.

Harman, G., (2015). *The metaphysics of objects: Latour and his aftermath (draft)*. [online] Available from: Pervegalit. <http://www.pervegalit.files.wordpress.com> > [Accessed 3 March 2015].

Health and Care Professions Council., (2015). Standards for Prescribing. [online] Available from: Health and Care Professions Council. <<http://www.hcpc-uk.org>> [accessed 16 Feb 2015].

Herbal Medicine Regulatory Working Group., (2003). Recommendations on the Regulation of Herbal Practitioners in the UK. [online]. Available from: EHTPA. <<http://www.ehtpa.eu>> [Accessed 3 June 2012].

Hobbes, T., (2014 [1651]). 'Of the natural condition of mankind as concerning their felicity and misery'. In: Hobbes, T., *Leviathan*. London: Bibliophile Books.

Hoffmann, D., (1983). *The Holistic Herbal*. Shaftesbury: Element Books.

Hoffmann, D., (2003). *Medical Herbalism*. Rochester: Healing Arts Press.

Holmes, P., (2007). *The Energetics of Western Herbs*. 4th edition. Cotati: Snow Lotus Press.

- House of Lords., (2000). *Complementary and Alternative Medicine, report of the Select Committee on Science and Technology*. HL Paper 123. London. HMSO.
- Illich, I., (1973). *Tools for Conviviality*. London. Marion Boyars Publishing Ltd.
- Illich, I., (1974) *Medical Nemesis: the expropriation of health*. London: Marion Boyars Publishing.
- Illich. I., (1995 [1971]) *Deschooling society*. London: Marion Boyars Publishing Ltd.
- Jackson-Main, P., (2005). Western herbal medicine – gender, culture and orthodoxy. In: O’Sullivan, C. (ed). *Reshaping Herbal Medicine*. 87 – 98. London: Elsevier.
- Jagtenberg, T. and Evans, S., (2003) Global Herbal Medicine: a Critique. *The Journal of Alternative and Complementary Medicine*. **9**, (2) 321 – 329. [online] Available from: Mary Ann Liebert, Inc. <<http://www.liebertpub.com>> [Accessed 15 December 2011]
- Jones, K., (2003). The turn to a narrative knowing of persons: one method explored. *Nursing Times Research*, Jan, **8**, 60 – 71. [online]. Available from: Sage Publications. <<http://www.sagepub.com>> [Accessed 4 June 2012].
- Jones, O and Cloke, P., (2010). Non-human agencies: trees in place and time. In: Knappett and Malafouris. (eds). *Material Agency: towards a non-anthropocentric approach*. London. 79 – 96.
- Karst, J. *et al.*, (2012). Context dependence in foraging behaviour of *Achillea millefolium*. *Oecologia*. **170**, 925 – 933. [online]. Available from: SpringerLink. <<http://www.link.springer.com>> [Accessed 23 June 2015].
- Khan, G., (2012). Vital materiality and non-human agency: an interview with Jane Bennett. In: *Dialogues with contemporary political theorists*. London: Palgrave Macmillan. 43 – 57.
- Knappett, D. and Malafouris, L., (2010). Material and Nonhuman Agency: An Introduction. In: Knappett and Malafouris (eds). *Material Agency: towards a non-anthropocentric approach*. London: Springer. IX – XVII.
- Kohn, E., (2013)). *How Forests Think: toward an anthropology beyond the human*. Berkeley: University of California press.
- Landy, J. and Saler, M., (2009). *The Re-enchantment of the World: Secular Magic in a Rational Age*. Stanford: Stanford University Press.

- Langellier, K., (2001). Personal Narrative. In: Jolly, M. (ed). *Encyclopedia of life writing: autobiographical and biographical forms vol 2*. 699 – 701. London: Fitzroy Dearbon.
- Langwick, S., (2011). *Bodies, politics and African healing: the matter of maladies in Tanzania*. Indiana: Indiana University Press.
- Lapraz, J-C. and Kamyar, M., (2013a). *Endobiogeny: A Global Approach to Systems Biology (Part 1 of 2)*. Global Advances in Health and Medicine. **2** (1), 64 – 78. [online] Available from: PubMed Central. <<http://www.ncbi.nlm.nih.gov/pmc>> [Accessed 14 October 2104]
- Lapraz, J-C. and Kamyar, M., (2013b). *Endobiogeny: A Global Approach to Systems Biology (Part 2 of 2)*. Global Advances in Health and Medicine. **2** (2), 32 - 56. [online] Available from: PubMed Central. <<http://www.ncbi.nlm.nih.gov/pmc>> [Accessed 14 October 2104]
- Latour, B., (1993). *We Have Never Been Modern*. Cambridge: Harvard University Press.
- Latour, B., (1999). On recalling ANT. In: *Actor Network Theory and After*. Law, J. and Hassard, J. (eds). Oxford: Blackwell. 15 – 26.
- Latour, B., (2004). Non-humans. In: *Patterned Ground*. Harrison et al. (eds). London: Reaktion Books. 224 – 227.
- Latour, B., (2007). *Reassembling the social: an introduction to Actor-Network-Theory*. Oxford: Oxford University Press.
- Law, J., (1992). *A sociology of monsters: essays on power, technology and domination*. London: Routledge.
- Law, J., (2004). *After Method - mess in social science research*. London: Routledge.
- Law, J. and Hassard, J., (1999). *Actor Network Theory and After*. Oxford: Blackwell.
- Law, J. and Mol, A., (2002). *Complexities – social studies of knowledge practices*. Durham: Duke University Press.
- LeCompte, M. and Schensul., (2010). *Designing and conducting ethnographic research*. Maryland: AltaMira Press.
- London, J., (2015). The ecology of magic: an interview with David Abram. [online] Available from: Scott London <<http://www.scottlondon.com>> [Accessed 2 February 2015].

- Loots, G. *et al.*, (2013) Practicing a rhizomatic perspective in narrative research. In: Andrews et al (eds). *Doing Narrative Research*. London: Sage Publications. 108 – 125.
- MacLennan, E. and Pendry, B., (2011). The evolution of herbal medicine as an unorthodox branch of British medicine: the role of English legislation from antiquity to 1914. *Journal of Herbal Medicine*. **1**, 2 – 14.
- Madden, R., (2010). *Being Ethnographic*. London: Sage Publications.
- Marder, M., (2013a). *Plant-Thinking: a Philosophy of Vegetal Life*. New York: Columbia University Press.
- Marder, M., (2013b). What is Plant-Thinking? *Klesis – revue philosophique*. **25**. 124 – 143. [online]. Available from: <<http://www.revue-klesis.org>> [Accessed 8 March 2015].
- Marder, M., (2013c). Plant Intelligence and Attention. *Plant Signaling and Behavior*. **8**, e23902. [online] Available from: Taylor and Francis Online. <<http://www.tandfonline.com>> [Accessed 6 March 2015].
- Marx, K., (2013 [1864 volume 1/1884 volume 2]) *Capital: volumes One and Two*. Ware: Wordsworth.
- Mauss, M., (2002 [1954]). *The Gift: forms and function of exchange in archaic societies*. London: Taylor and Francis.
- McIntyre, M., (2005). Herbs and herbalists: professional identity and the protection of practice. In: O’Sullivan, C. (ed). *Reshaping Herbal Medicine: knowledge, education and professional culture*. London: Elsevier, 115 – 130.
- McIntyre, M., (2011). Statutory regulation – a legislative basis for herbal practice. *Journal of Herbal Medicine*. **1**, 30 – 32.
- McIntyre, M. (2013)., Herbal Regulation in the United Kingdom – the Stop Start Process. *Herbal EGram*. **10** (12), December. [online] Available from: American Botanical Council. <<http://www.herbalgram.org>> [accessed 2 Feb 2014].
- McNickle, GG. and Cahill, JF., (2009). Plant root growth and the marginal value theorem. *Proceedings of the National Academy of Sciences of The United States of America*. March. **106** (12). 4747 – 4751. [online] Available from: The Proceedings of the National Academy of Sciences of the United States. <<http://www.pnas.org>> [Accessed 23 June 2015].
- Mediherb., (2015). *Standard Process*. [online] Available from: Standard Process. <<http://www.standardprocess.com>> [Accessed 17 February 2015].

- Merrill, B. and West, L., (2009). *Using biographical methods in social research*. London: Sage.
- Menzies-Trull, C., (2003). *Herbal Medicine – Keys to Physiomedicalism including Pharmacopoeia*. Newcastle: Faculty of Physiomedical Herbal Medicine.
- Mills, S., (2013). An evening with Mills and Bone. Recording of talk given by Simon Mills and Kerry Bone. Tuesday 16th April. The Pullman Brisbane QLD 4000. Available from: Integria Healthcare. <<http://www.integria.com>> [Accessed 3 February 2015].
- Mills, S. and Bone, K., (2000). *Principles and Practice of Phytotherapy: Modern Herbal Medicine*. London: Churchill Livingstone.
- Milton, K., (2002). *Loving Nature*. London: Routledge.
- Moffatt, D., (1986) *A review of the extent and influence of Thomson's American medico botanic system in industrial England, 1880 – 1930*. Unpublished MA Thesis. Centre for the Study of Social History. University of Warwick.
- Naraindas, H., (2011). Of relics, body parts and laser beams: the German Heilpraktiker and his Ayurvedic spa. *Anthropol Med.* 18 (1), 67 – 86. [online]. Available from: Taylor and Francis Online. <<http://www.tandfonline.com>> [Accessed 2 May 2012].
- Narby, J., (2006) Plants as Brains. In: Narby, J., *Intelligence in Nature*. London: Penguin.
- National Institute of Medical Herbalists., (2015a). *National Institute of Medical Herbalists Code of Ethics and Practice*. [online] Available from: The National Institute of Medical Herbalists. <<http://www.nimh.org.uk>> [Accessed 5 February 2015].
- National Institute of Medical Herbalists., (2015b). *National Institute of Medical Herbalists Continuing Professional Development: Guidelines for Medical Herbalists*. [online] Available from: The National Institute of Medical Herbalists. <<http://www.nimh.org.uk>> [Accessed 6 February 2015].
- Nichter, M. and Lock, M., (eds) (2002). *New Horizons in Medical Anthropology*. Oxon: Routledge.
- Nightingale Collaboration., (2015). *Herbalism on the NHS: complaint upheld*. [online]. Available from: <<http://www.nightingale-collaboration.org/news/154-herbalism-on-the-nhs-complaint-upheld.html>> [Accessed 13 Feb 2015].

Nissen, N., (2011). Perspectives on holism in the contemporary practice of Western herbal medicine in the UK. *Journal of Herbal Medicine*. **1**, 76 – 83.

Nissen, N. and Evans, S., (2012). Exploring the practice and use of Western herbal medicine: perspectives from the social science literature. *Journal of Herbal Medicine*. **2**, 6 – 15. [online] Available from: Science Direct. <<http://www.sciencedirect.com>> [Accessed 12 January 2012].

Owen, N., (2013). *Principles and Practice of Phytotherapy – modern herbal medicine*. Bone, K and Mills, S. 2nd edition. Book Review. *Journal of Herbal Medicine*. **3** (3) 120 – 122.

Palecek, M. and Risjord, M., (2012). Relativism and the ontological turn within anthropology. *Philosophy of the social sciences*. **43** (1), 3-23. Available from: Sage publications. <<http://www.sagepub.com>> [Accessed 23 November 2014].

Pels, P., (2003). Introduction: Magic and Modernity. In: *Magic and Modernity*. Meyer, B. and Pels, P., pp 1 – 38.

Pendry, B., (2011). Editorial. *Journal of Herbal Medicine*. **1**, (1). [online] Available from: Science Direct. <<http://www.sciencedirect.com>> [Accessed 14 February 2015].

Peirano, M., (1998). When anthropology is at home: the different contexts of a single discipline. *Annu.Rev.Anthropol.* **27**, 105 – 28. Available from: Annual Reviews. <<http://www.annualreviews.org>> [Accessed 2 November 2015].

Pickering, A., (1994). Book Review – We Have Never Been Modern. *Modernism/Modernity*. **1** (3) 257 – 258. [online]. Available from: Project Muse. <<http://www.muse.jhu.edu>> [Accessed 5 July 2013].

Pintea, A. *et al.*, (2003). HPLC analysis of carotenoids in four varieties of *Calendula officinalis* L. flowers. **47**, (1 – 4) 37 – 40. *Acta Biologica Szegediensis*. Online Available from: Universitas Scientiarum Szegediensis. <<http://www2.sci.u-szeged.hu>> [Accessed 12 April 2015]

Pitman, V., (2005). The relationship of classical Greek medicine to contemporary Western herbalism: an exploration of the idea of ‘holism’. In: O’Sullivan, C. (ed). *Reshaping Herbal Medicine. Knowledge, Education and Professional Culture*. London: Elsevier, 99 – 114.

Pitman, V., (2013). Early Greek Medicine: Evidence of Models, Methods and *materia medica*. In: Stobart, A. and Francia, S. (eds). *Critical Approaches to the History of Western Herbal Medicine. From classical antiquity to the early modern period*. London: Bloomsbury.

- Pollan, M., (2013). The Intelligent Plant: scientists debate a new way of understanding flora. *The New Yorker*. [online]. Available from: <<http://www.newyorker.com>> [Accessed 2 February 2015].
- Plant Signaling and Behavior., (2015). *Aims and Scope*. [online]. Available from: Taylor and Francis Online. <<http://www.tandfonline.com>> [Accessed 12 January 2015].
- Priest, A., (1959). *Studies in Physiomedicalism. Paper 2. Principles of Diagnosis*. Exeter: National Institute of Medical Herbalists.
- Priest, A., (1961). *Studies in Physiomedicalism. Paper 3. Principles of Medication*. Exeter: National Institute of Medical Herbalists.
- Priest, A., (1962). *Studies in Physiomedicalism. Paper 4. Materia Medica*. Exeter: National Institute of Medical Herbalists.
- Priest, A. and Priest L., (1983). *Herbal Medication: a clinical and dispensary handbook*. Saffron Walden: CW Daniel Company.
- Professional Standards Authority., (2015). Standards for Accredited Registers. [online]. Available from: *The Professional Standards Authority*. <<http://www.professionalstandards.org.uk>> [Accessed 13 June 2015].
- Riessman, C., (1990). *Divorce Talk*. New Brunswick: Rutgers University Press.
- Riessman, C., (2008). *Narrative Methods for the Human Sciences*. London: Sage Publications.
- Ritzer, G., (1975). Professionalization, bureaucratization and rationalization: the views of Max Weber. *Social Forces*. **53** (4), 627 – 634. [online] Available from: Jstor. <<http://www.jstor.org>> [Accessed 2 December 2014].
- Robbins, C., (1994). Fred Fletcher-Hyde. *European Journal of Herbal Medicine*. **1** (1), 29 – 33.
- Rousseau, J-J., (1998 [1762]). *The Social Contract*. London: Bibliophile Books.
- Saks, M., (2002a). Professionalization, Regulation and Alternative Medicine. In: *Regulating the Health Professions*. Allsop, J. and Saks, M. (eds). London: Sage, 148 – 161.
- Saks, M., (2002b). *Orthodox and Alternative Medicine. Politics, professionalization and health care*. London: Sage.

Saler, M., (2006). Modernity and enchantment: a historiographic review. *The American historical review*. June. **111** (3), 692 – 716. [online] Available from: Jstor. <<http://www.jstor.org>> [Accessed 30 September 2014].

Scheid, V., (2002). *Chinese Medicine in Contemporary China: plurality and synthesis*. Durham, NC: Duke University Press.

Scheid, V., (2006). Chinese Medicine and the Problem of Tradition. *Asian Medicine*. **2** (1), 59 – 71. [online] Available from: Ingenta Connect. <<http://www.ingentaconnect.com>> [Accessed 4 March 2012].

Seigworth, G. and Gregg, M., (2010). An Inventory of Shimmers. In: Gregg, M. and Seigworth, G. *The Affect Theory Reader*. Durham: Duke University Press. p1 - p25.

Sense About Science., (2015). Proposed registration of herbal medicine practitioners. [online]. Available from: <<http://www.senseaboutscience.org>> [Accessed 13 Feb 2015].

Sermijn, J. *et al.*, 2008. The narrative construction of the self. Selfhood as a rhizomatic story. *Qualitative Inquiry*. **14** (4), 632 – 650. [online]. Available from: Sage Publications. <<http://www.sagepub.com>>

Shapin, S. and Shaffer, S., (1985). *Leviathan and the air-pump*. Princeton: Princeton University Press.

Shelley, D., (2014a). NIMH – Celebrating 150 Years. Avena. Spring 2014. *Journal of the New Zealand Association of Medical Herbalists* [online]. Available from: New Zealand Association of Medical Herbalists. <<http://www.nzamh.org.nz>> [accessed 11 November 2014].

Shelley, D., (2014b). A brief history of the National Institute of Medical Herbalists. In: *Herbal Exchanges*. Brice-Ytsma, H. and Watkins, F. (eds). Exeter: NIMH Ltd, 3 – 10.

Sherry, P., (2009). Disenchantment, re-enchantment and enchantment. *Modern Theology*. **25** (3), 369 – 386. [online] Available from: Wiley Online Library. <<http://www.onlinelibrary.wiley.com>> [Accessed 26 October 2013].

Shukla, N. *et al.*, (2014). *Combining thematic and narrative analysis of qualitative interviews to understand children's spatialities in Andhra Pradesh, India*. [online]. Available from: National Centre for Research Methods. <<http://www.eprints.ncrm.ac.uk>> [Accessed 13 January 2015].

Simard, SW., (2012a). Mycorrhizal networks and seedling establishment in Douglas-fir forests. In: Southworth, D. (ed). *Biocomplexity of Plant–Fungal Interactions, First Edition*. London: John Wiley & Sons, Inc. 85-107.

- Simard, SW., (2009). The foundational role of mycorrhizal networks in self organization of interior Douglas-fir forests. *Forest ecology and management*. 258S , S95 – S107. [online]. Available from Elsevier. <<http://www.sciencedirect.com>> [Accessed 13 January 2015].
- Simard, SW. *et al.*, (2012). Mycorrhizal networks: mechanisms, ecology and modelling. Invited Review. *Fungal Biology Reviews*, **26**, 39-60. [online]. Available from: Science Direct. <<http://www.sciencedirect.com>> [Accessed 13 January 2015].
- Singer, J. and Fischer, K., (2007). *The impact of co-option on herbalism: a bifurcation in epistemology and practice*. *Health Sociology Review*. **16** (1), 18 – 26. [online] Available from: ProQuest <<http://search.proquest.com>> [Accessed 15 March 2012].
- St. George, D., (1994). Biomedical Research or New Paradigm? *European Journal of Herbal Medicine*. **1** (1). 38 – 39.
- Stahlberg, R., (2006). Historical overview of plant neurobiology. *Plant signaling and behavior*. **1** (1), 6 – 8. [online]. Available from: Taylor and Francis. <<http://www.landesbioscience.com>> [Accessed 10th January 2015].
- Stewart, C., (2010) *Hermeneutical Phenomenology: experiences of girls with Asperger's syndrome and anxiety, and Western Herbal Medicine*. PhD thesis. [online]. Available from: Edinburgh Napier University. <<http://www.researchrepository.napier.ac.uk>> [Accessed 27 February 2013]
- Stobart, A. and Francia, S., (2013). The Fragmentation of Herbal History. In: Stobart, A. and Francia, S. (eds). *Critical Approaches to the History of Western Herbal Medicine. From classical antiquity to the early modern period*. London: Bloomsbury, 1 – 22.
- Swale, M., (1994). British Herbal Compendium - review. *European Journal of Herbal Medicine*. **1** (1) 49 – 50.
- Szerszynski, B., (2004). *Nature, Technology and the Sacred*. London: Wiley-Blackwell.
- Tassell, M., (2007). *Posology in Herbal Medicine: do we have a sound basis?* Unpublished MSc Thesis. Scottish School of Herbal Medicine.
- Thomson, S., (1849). *New Guide to Health, or Botanic Family Physician: containing a complete system of practice, upon a plan entirely new: with a description of the vegetables made use of, and directions for preparing and administering them to cure disease. (To which is added): Narrative of the life of Samuel Thomson*. [online]. Available from: Google Books: <<http://www.books.google.co.uk>> [Accessed 24 February 2015].

Thurston, JM., (1900). *The Philosophy of Physiomedicalism: its theorem, corollary and laws of application for the cure of disease*. Richmond: Nicholson Printing. [online]. Available from: Soil and Health <<http://www.soilandhealth.org>> [Accessed 2 February 2015].

Tobyn, G. et al., (2010). *The Western Herbal Tradition: 2000 years of medicinal plant knowledge*. London: Churchill Livingstone.

Treasure, J., (2014). Back to the Future – Herbalism 3.0 Part 1: Foundations. *Journal of the American Herbalists Guild*. **12**, 1. 18 – 26. [online] Available from: the American Herbalists' Guild. <<http://www.americanherbalistsguild.com>> [Accessed 2 November 2014].

Trewavas, A., (2005). Plant Intelligence. *Naturwissenschaften*. **92**, 401 – 413. [online] Available from: Springer Link <<http://www.link.springer.com>> [Accessed 3 March 2015].

Trewavas, A., (2007). Response to Alpi et al: Plant neurobiology – all metaphors have value. *Trends in Plant Science*. **12** (6). 231 – 233. [online]. Available from: Science Direct. <<http://www.sciencedirect.com>> [Accessed 10 January 2015].

Trewavas, A., (2015). *Profile of Anthony Trewavas*. *Molecular Plant*. **8**, 345 – 351. [online] Available from: Science Direct. <<http://www.sciencedirect.com>> [Accessed 3 March 2015].

VanMarie, E., (2002). *Re-presenting herbal medicine as phytotherapy: a strategy of professionalisation through the formation of a 'scientific' medicine*. Unpublished PhD. [online] Available from: White Rose University Consortium. <<http://etheses.whiterose.ac.uk>> [Accessed 16 January 2012].

Watson, P., (2014). *The Age of Nothing*. London: Weidenfeld and Nicolson.

Wahlberg, A., (2007). A quackery with a difference – New medical pluralism and the problems of 'dangerous practitioners' in the United Kingdom. *Social science and medicine* **65**, 2307 – 2316. [online] Available from: Science Direct <<http://www.sciencedirect.com>> [Accessed 24 November 2011].

Wahlberg, A., (2008). Pathways to plausibility: when herbs become pills. *Biosocieties* **3** (1) 37 – 56. [online] available from: Science Direct. <<http://www.sciencedirect.com>> [Accessed 20 October 2011].

Wahlberg, A., (2010). Rescuing Folk Remedies: Ethnoknowledge and the Reinvention of Indigenous Herbal Medicine in Britain. In: Moore, R and McClean, S. (eds). *Folk Healing and Health Care Practices in Britain and Ireland*. Oxford: Berghahn Books, 130 – 155.

Walker, D., (2015). Report on the regulation of herbal medicines and herbal practitioners. 26th March 2015. [online]. Available from: UK Government. <<https://www.gov.uk/government/publications/advice-on-regulating-herbal-medicines-and-practitioners>> [Accessed 1st June 2015].

Webb, W.H., (1916). *The Standard Guide to Non-Poisonous Herbal Medicine*. Southport: WH Webb.

Weber, M., (2004 [1919]). Science as Vocation. In: *Max Weber. The Vocation Lectures*. Owen, D. and Strong, T. (eds). Cambridge: Hackett Publishing.

Weiss, R., (1988). *Herbal Medicine*. Gothenburg: AB Arcanum.

Wengraf, T., (2001). *Qualitative Research Interviewing: biographic narrative and semi-structured methods*. London: Sage Publications.

Wengraf, T., (2012). *Interviewing for life-histories, lived periods and situations, and ongoing personal experiencing using the Biographic-Narrative Interpretative Method (BNIM)*. Unpublished document. Personal Communication.

West, L. *et al.*, (2014). Researching student experience. In: Finnegan, F. *et al.* (eds). *Student Voices on Inequalities in European Higher Education*. London: Routledge.

Wetherell, M., (2012). *Affect and Emotion: a new social science understanding*. London: Sage Publications.

Whitebook, J., (2002). Slow Magic: Psychoanalysis and 'The Disenchantment of the World.' *J Am Psychanal Assoc.* **50** (4), 1197 – 1217. [online] Available from: Sage Publications <<http://www.apa.sagepub.com>> [Accessed 9 November 2015].

Whyte, S., (2003). *Social Lives of Medicines*. Cambridge: Cambridge University Press.

Whitehouse, J., (2014). Research informing herbal medicine practice. In: Brice-Ytsma, H. and Watkins, F. (eds). *Herbal Exchanges: in celebration of the National Institute of Medical Herbalists 1864 – 2014*. 77 – 86.

Williamson, E., (2014). Forward. In: Francia, S. and Stobart, A. *Critical Approaches to the History of Western Herbal Medicine: from Classical Antiquity to the Early Modern Period*. London: Bloomsbury.

Williamson, K., (2006) Research in constructivist frameworks using ethnographic techniques. *Library Trends.* **55** (1) 83 – 101. [online] Available from: Ebscohost <<http://web.ebscohost.com>> [Accessed 12 November 2011].

Winston, D. and Dattner, A., (1999). The American System of Medicine. *Clinics in Dermatology*. **17** (1), 53 – 56. [online] Available from: ScienceDirect. <<http://www.sciencedirect.com>> [Accessed 2 December 2013].

Wood, M., (2002). The six tissue states: the energetics of Physiomedicalism. *Journal of the American Herbalists' Guild*. **3** (1), 28 – 33.

