How medicine could have developed differently: A Tory historiographical analysis of the conflict between allopathic and homoeopathic medicine in America and Britain from 1870 to 1920.

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How Medicine Could Have Developed Differently: A Tory Historiographical Analysis of the Conflict Between Allopathic and Homoeopathic Medicine in America and Britain from 1870 to 1920.

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Abstract

After its formulation by Samuel Hahnemann (1755-1843) at the end of the 18th century, homoeopathy spread to Britain and America in the 1820s. Based upon the principle or law of "similia similibus curentur"- let like be cured by like-homoeopathy presented a serious challenge to allopathic medicine. By the 1870s homoeopaths were part of science, performing the first single blind clinical trial, establishing the action of drugs upon the body by experimentation and investigating the nature of matter. Institutionally established, especially in the U.S., they regularly published statistics demonstrating the superiority of homoeopathic treatment in both general practice and in hospitals. Allopaths responded by "nihilating" homoeopathic theory and practice on several levels. Through the language of bacteriology they absorbed key homoeopathic tenets into their own symbolic universe. During the Progressive Era allopaths' ideological resonance with the corporations enabled them to finally vanquish homoeopaths and define medical science along new lines.

Homoeopathy's decline in the 1920s was precipitated by its inability to handle experimental error effectively. Yet homoeopaths had raised important epistemological questions about the nature of the relationship between drugs and the human organism. These were never resolved but became repressed along with homoeopathy's scientific history. Since Tory historiography claims that the past informs the future, my aim in recovering homoeopathy's history is to highlight the contemporary importance of these issues for medicine. Only by explicitly addressing these unresolved dilemmas will the Hegelian outworking of Reason be accomplished.

Introduction

This chapter will outline my historiographical approach to homoeopathy's history in the U.S and U.K. in the 19th century. First, I will explain the conceptual schema of Hayden White (1975) which I draw upon extensively to reveal the irreducible ideological component of the historical narratives I will review in chapter one. Secondly, I will outline the differences between Whig, Prig and Tory historiographies, detailing the political stance of each. Thirdly, I will show how homoeopathy currently has three socio-political and five historiographic problems to contend with. Finally, I shall outline the narrative structure of my own account and argue that only such an Hegelian inspired approach can adequately recover homoeopathy's past. Such an historiographical approach enables me to argue that homoeopathy's decline at the turn of the 20th century was not inevitable and that homoeopathy represents an abandoned historical trajectory that merits further investigation, one which can inform the current epistemological crisis in medicine.

Hayden White's "Metahistory"

In 1975 Hayden White produced a highly influential account of the narrative styles used by historians, emphasising particularly those modes which predominated in 19th century Europe. White showed there are (at least) three modes of explanation in the historical field- explanation by emplotment, explanation by formal argument and explanation by ideological implication. Emplotment converts a chronicle into a narrative, argument attempts to explain what it all adds up to, and ideological implication denotes the historians ethical position on the nature of historical knowledge and its contemporary significance. I will take each of these explanatory styles in turn.

Explanation by Emplotment.

White reminds us that, whilst a chronicle is merely a record of events perceived as significant by the chronicler presented in the order of their appearance, an historical narrative, such as that produced by professional historians, attempts to *tell a story.* White points out that there are different kinds of stories that can be told and that these

narrative effects are achieved by the employment of several literary devices. One of these is in the "motifing" of events. Every historical narrative has events which the narrator "motifs", or selects as significant. These events are either typified as *inaugural*-the significant beginning of something- *transitional*- mediating an historical process already under way- or *terminating*- representing the end of some process, conflict or series of events. Often, historians will motif different events in the historical field as significant but even when the same events are motifed those events can be threaded together, or emplotted, to tell quite different stories.

White distinguishes between four modes of emplotting an historical narrative. Explanation by emplotment can be cast either in Romantic, Comic, Tragic or Satirical mode. Each of these modes represents the historian's perception of Man's capacity to shape his world. In a Romantic emplotment, the hero, (or heroes) transcends the world of experience in a triumphant resolution. This is the story where good vanquishes evil, light transcends darkness, and virtue overcomes vice. By contrast, both the Tragic and Comic modes of emplotment permit only a partial resolution of tension and conflict and of Man's ability to shape his own destiny. In the Comic mode the forces at play in the social and natural worlds are only occasionally reconciled and Man is temporarily triumphant over his world. Here men are reconciled to men, with their world and society, which is then represented as happier, healthier and saner as a result of the conflict of *seemingly inalterably opposed* elements in the world. The Tragic emplotment is far more cynical. Whilst the protagonist may have fallen and his world been shaken the only saving grace in the reconciliation is that spectators of the contest have gained in consciousness, a heightened awareness of the laws governing human existence which the protagonists' struggle has made manifest to the world. Thus the reconciliations in the Tragic emplotment are more sombre than the Comic and take the form of Man's resignation to the conditions under which he must labour. The antithesis of humanism, the Tragic emplotment portrays such conditions as eternal and unalterable by the human will, historical agents at best only being able to work within the constraints imposed upon them from without. Thus, Romance, Comedy and Tragedy all embrace conflict seriously. Whilst the former sees human redemption in the face of hostile forces as possible, the Comic portrays reconciliation as temporary and partial, whilst Tragedy portrays it as revealing the forces opposing Man.

Satire is different. Satire considers the hopes of the Romantic, the possibilities of the Comic and the truths of the Tragic emplotments ironically because it sees human consciousness as ultimately inadequate to the task of living in the world happily or comprehending it fully. Satire proposes the ultimate inadequacy of the visions of the world represented by the above three emplotments as well as being aware of its *own inadequacy* to represent reality fully. In the eyes of the Satiric historian the world has grown old and all sophisticated conceptualisations of the world are repudiated.

Within these four modes of emplotment are different conceptualisations of time. Whilst all historians embrace change in their narratives to some extent, not all embrace continuity and change in the same way. Whilst Romance and Comedy are diachronic (encompassing processionary change) in their emphasis upon the emergence of new forces out of processes that appear changeless, Tragedy and Satire are synchronic (static) in their conceptualisation of ongoing structures behind the array of events within a chronicle. But as White points out these conceptualisations are not mutually exclusive. Indeed, the historian often brings each to bear at different points in her narrative, emphasising change here, stasis there. As I will show in this thesis, whilst I deploy diachronic *and* synchronic modes of conceptualising time, as do other historians, I deploy them at different points in my narrative to motif different events. In so doing I produce a different narrative effect and conclusions to extant narratives on homoeopathy's history.

Explanation by Formal Argument

As well as achieving a particular narrative effect by emplotment the historian has at her disposal several modes of formal argument. Whilst emplotment denotes a narrative as a story of a particular kind, formal argument provides an explanation of that story by "[...] invoking principles of combination which serve as putative laws of historical explanation"[1]. As with modes of emplotment, there are (at least) four modes by which such putative laws of historical explanation may be invoked.

[1] Hayden White (1975) p 11

As will be seen later, I take issue with this characterisation by White of historians' *capabilities* to invoke formal arguments in narrative construction[2]. Nevertheless, White claims the four modes regularly invoked by historians are the Formist, Contextualist, Organic and Mechanistic explanatory modes. The Formist mode is favoured by Romantic historians, which White uses, where the aim is to depict the variety, colour and richness of the historical landscape. Whilst generalisations regarding the historical process are often made in a Formist narrative, the principle aim of the narrator is to relate the uniqueness of the different agents, agencies and acts which make up the "events" to be narrated. Formism has an essentially "dispersive" rather than "integrative" affect on the data, magnifying differences over similarities between historical phenomena. As will be seen many historians of homoeopathy make this significant dispersive move. One trend is to portray the differences in homoeopathy between many countries[3]. Another is to highlight the differences between allopathy and homoeopathy. As White notes such accounts are often wide in scope and so generalised so as to make confirmation or disconfirmation by empirical data impossible. The dispersive nature of Formism is the narrative account I read with the most frustration since the reader is left wondering what it all adds up to.

Alternately, in an attempt to answer this question many historians feel justified in using secondary data *as if they were primary sources,* or at least as a substitute for primary sources[4]. Such has led to *archival negligence,* preventing *homoeopathy's full recovery,* which in turn has resulted in a lack of *comparative analysis.* Primary allopathic sources are compared to secondary homoeopathic ones or vice versa, thus perpetuating misunderstanding.

The Organicist mode of formal explanation on the other hand is more *reductive* and *integrative* in its operations by virtue of the fact that it depicts historical phenomena

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[2] I take exception to White's comment that "The nature of generalisations only points to the "protoscientific" character of historical explanation in general, or the inadequacy of the social sciences from which such generalisations [...] ,might be borrowed."(p 12). It has been pointed out by sociologists of science that there exists no such thing as the "scientific method" *in practice* (Fuller 1997) So, "proto- scientific" is a misnomer. Further, it is not so much that the social sciences are 'inadequate' but that their theories and concepts are inadequately utilised by historians. At the same time only a minority of sociologists are interested in history. I will show in this thesis that many sociological concepts are invaluable to the historian who otherwise relies on fairly ad hoc, impressionistic assumptions and explanations, especially in the current "contextualist" climate.

[3] Dinges (2001)

[4] See Dinges (2001) use of the work of Kaufman (1971).

as components of synthetic processes. The whole is greater than the sum of its parts which exist in a micro-cosmic /macro-cosmic relationship to one another whilst apparently dispersed events become abstracted and crystallized into a single entity. Idealists such as Hegel wrote such teleological or goal oriented historical narratives. Organicists seek the "principles" or "ideas" rather than the "laws" of the historical process, which "prefigure" rather than "cause" the final outcome[5]. As such, human freedom is guaranteed rather than constrained, with human agency seen as active in this optimistic mode of argument. These characteristics clearly make the Organicist formal argument ideally suited to a Comic emplotment with its emphasis upon synthesis and partial resolution.

The Mechanistic mode of formal argument is also integrative, but reductive rather than synthetic in its operation. Human action is depicted as the outcome of laws of historical process. For the Mechanist explanation is considered complete only when she has discovered those laws and can make historical data configure so as to be illustrative of them. Marx is the obvious historical candidate here. The Mechanist explanation obviously entails a high level of abstraction and an emphasis upon similarity between historical phenomena. Apparent differences are only phenomenal and belie the underlying causative agencies. In today's postmodern context both Mechanistic and Organicist modes of formal argument bear the stigma of "meta narratives".

Lying somewhere between Formism on the one hand and Organicism and Mechanism on the other, lies Contextualism. For many historians Contextualism is the answer to their methodological prayers. Representing a "functional" conception of the meaning of historical events, Contextualism argues that events can be explained by placing them in the context of their occurrence. It will be readily seen how Contextualism has a tendency to produce synchronic accounts of "periods", "ages" or "epochs", rather than diachronic "world history" meta narratives. As White points out, should the Contextualist dare to string several of these accounts together, then she would be moving outside of her Contextualist framework into either Mechanistic or Organicist territory. For the Contextualist, explanation lies in the inter relationships the agencies

[5] The 19th century Hegelian "idea" in this context was, of course, "science".

or events under study bore to other events or agencies in the historical field at the time. In a crisis of identity typical of everything fashionable in a post modern world Contextualism avoids the dispersive tendency of Formism and the Integrative moves of Organicism and Mechanism and seeks the *relative integration* of historical phenomena in a bounded time frame, the first, final and material causes of which can never be known. Conceptualising time in wave- like terms, the Contextualist singles out certain time periods in history as more significant than others, periods when "things happened". In so doing she can combine some of the detail of the Formist with some of the breadth of the Organicist and Mechanist. Whilst this makes Contextualism look like some kind of shoddy compromise, as White notes on the positive side, "[...] a Contextualist conception of truth, explanation and verification appears to be surpassingly modest in what it asks of the historian and demands of the reader"[6]. However, Contextualism has its drawbacks, not least of which is its Conservative/Liberal ideological implication, the subject of the following section.

Explanation by Ideological Implication

In view of the foregoing, it is somewhat surprising that White, when considering his third mode of explanation, by ideological implication, should state " [...] a given historians' emplotment of the historical process, or way of explaining it in a formal argument need not be regarded as a function of his consciously held ideological position. Rather, the form that he gives to his historical account can be said to have ideological implications with one or another of the four positions differentiated [below] "[7]. In explaining these four modes of explanation by ideological implication I will show how I depart from White on this issue of the relationship of ideological implication and the mode of emplotment/argument selected. Indeed, White appears somewhat ambivalent on this matter.

Following Mannheim's four ideological distinctions in "Ideology and Utopia" of Conservative, Liberal, Anarchic and Radical, White notes that these four modes of explanation by ideological implication recognise the inevitability of social change but

[6] White (1975) p 19
[7] White (1975) p 24

see the pace and nature of that change differently[8]. For the Conservative, change comes gradually, or organically (Mannheim uses a plant analogy) and occurs according to a natural rhythm of things within current institutional structures. Whilst the fundamental structure of society is seen as sound, and the best that can be currently hoped for, some change is considered inevitable, but only to certain isolated parts of the social system. The Liberal also sees change as inevitable but in the remote future and according to the "social rhythm" of parliamentary debate and education. Radicals and Anarchists on the other hand consider society flawed at some fundamental level, the former being more conscious of the power needed to overturn existing vested institutional interests. For Radicals utopia is imminent, whilst Anarchists idealise a remote past of natural-human innocence (prisca sapienta) from which Man has fallen into corruption. This utopia is projected onto a non- temporal plane so that change can be expected at any time.

Conservatism is, of course, the most socially congruent position, Liberalism being less so, whilst Anarchism is the most socially transcendent, but Radicalism less so. It is the value accorded the current social system that accounts for their differences in position regarding the form that historical knowledge should take. Whilst there are no prescribed ways in which the above modes of emplotment, argument, and ideological implication should be combined, certain elective affinities exist between them, as represented in the table below.

Mode of Emplotment	Mode of Argument	Mode of Ideological Implication
Romantic	Formist	Anarchist
Tragic	Mechanistic	Radical
Comic	Organicist	Conservative
Satirical	Contextualist	Liberal

Figure 1 The Elective Affinities of White's Modes of Emplotment, Argument and Ideological Implication

[8] Mannheim (1936)

White claims Formism and Contextualism have dominated historiography. Marx and Hegel typically suffer as "philosophers of history", having dared to stray from this well- worn path[9]. White claims such adverse judgement represents;

"[...] only bias on the part of the professional establishment. Commitment to the dispersive techniques of Formism and Contextualism reflects only a *decision* on the part of historians not to attempt the kind of integrations of data that Organicism and Mechansim sanction as a matter of course [...] These...opinions [...] seems to be generally ethical and specifically ideological in nature"[10].

Hence, White concludes there is a direct, irreducible connection between the mode of emplotment/argument adopted by an historian and her ideology.

The Politics of Historiography: Whigs, Prigs and Tories.

This thesis will argue that within the history of medicine both Formism and Organicism have been dominant in the 20th century but these have recently given way to a preponderance of Contextualist narratives. As White concedes, just as the value accorded the establishment accounts for historians' different conceptions regarding the form historical knowledge should take, it follows that those different conceptions of history betray to the reader the value accorded the establishment by the author. Again there is a link between historical conceptualisation and ideology. Put simply, if historians agree about the form historical knowledge should take, and to the extent that Contextualism dominates, it seems they do, and if by establishment we mean the "Academy", then historians in their common approach must share the same value regarding the establishment[11]. And it is to "Kuhnificaton" that we must look as the source of this claustrophobia. I suggest that Contextualism is nothing more than historians engaging in the puzzle solving of "normal science", filling in the missing pieces of the dominant paradigm, that paradigm having been established by previous Formist and Organicist histories. The former have denoted the variety in medicine

[9] See Steve Fuller (2002) for how the same designation of "philosophers" has come to be given to failed natural scientists by contemporary historians of science.
[10] White (1975) p 21 (italics added).
[11] Niall Ferguson (2003) has, for example, pointed out the failure of counterfactual arguments to "catch on " among professional historians, such apparently being considered the remit of the novelist and journalist. (pp 1-19)

whilst minimising any direction it may be going in, whilst the latter's selection process has portrayed the telos of progress to which history has been heading, that Man has overcome the death and diseases of the past to live in the best of all possible worlds. Failing to imagine homoeopathy as being anything other than marginalized these historians perpetuate that marginality .The only thing left to do now, these historians subconsciously reason, is to understand that world to the extent that we are able, not to question it's nature, or raise doubts about the sort of inquiry we should be conducting, or to what end our inquiry is aimed. It seems that Contextualism is a natural corollary to postmodernism and the relativism inherent within it.

The transition from the Formist/Organicist mode of argument with its Romantic/Comic[12] mode of emplotment and Anarchist/Conservative ideology to the Contextualist mode of argument with its Satirical[13] mode of emplotment and Conservative/Liberal ideology in the history of medicine parallels in turn the transition from the "Whig" to the "Prig" mode of historical writing[14]. Whig historians are so called because they continue in the 19th political tradition of using historical documents to legitimate political arrangements. The Whig narrative is thus archive based, linear and progressive, seeing the past only in terms of being a forerunner to the present. The Whig is not interested in lost historical projects since she believes we live in the best of all possible worlds. History shows Mankind's onward and upward progress from ignorance to enlightenment, from superstition to reason. Each generation has built on the achievements of the last in a shoulder- of- giants metaphorical trope. Presentism is a most distinctive feature of Whig history, using as it does present day categories to analyse historical agents. Whiggism is politically inactive because no need for action is perceived. In the great scheme of things, and paralleling biblical teleology, the natural law of progress guides Mankind to the highest levels of achievement. In the context of the history of medicine, current biomedicine is the best there ever has been and the best there is. The Whig account may be cast as a master, grand or meta-narrative, depending upon the ambitions of the historian, and represents a "philosophical history".

[12] See Rothstein (1972) and Kaufman (1971) for the history of homoeopathy, or Porter (1997), Bynum (1994) for general medical history.
[13] See Sturdy and Cooter (1998), Dinges (2001) and Juette (1998).
[14] I do not mean from this assertion that Whigs are always Romantics, though they usually are, emphasising as they do complete resolutions, or that Prigs are always Satirists. But I would suggest these combinations represent more elective affinities.

The Prig on the other hand sees the historical field in terms of the possibility of many outcomes, none of which are better or worse than the other, since all make sense in their own terms. The Prig is the arch relativist, who, whilst writing in the Thucyddian tradition from a sense of loss or disappointment, recovers "other worlds" of the past to bolster her own authority. Prig history clearly resonates with our post-modern age, one characterised by the putative death of the meta, grand and master narratives, a world in which narrative finality is itself deemed to have met its end. Whilst "post modern", Prig historical narratives may indeed seek to recover lost historical worlds, but they achieve this only in so far as to generate an understanding of those worlds *in their own terms, not to pass judgement upon them, nor to use them as informants for the future or as springboards for political action.* In all this the Prig ensures her own political values remain hidden.

However, all is not lost since, during this period of transition where Whig history has been superseded by Prig, a third historiographical approach has re- emerged- the "Tory" narrative. This concept, implicit in Hegel[15], made explicit by Stephen Brush [16]and elaborated by Steve Fuller [17]conceives of the past, not as a series of dead ends and justifiably abandoned trajectories (Whig), or as a collection of interesting curiosities (Prig), but as a repository of lost opportunities. The Tory historian, whilst sharing with the Whig the status of "philosophical history",[18] is ostensibly anti-Whig, writing with a clear political agenda viz. the current world is sub-optimal. Like the Prig, the Tory also writes from a sense of loss but believes something can, and should, be done since history's losers were right all along and deserve a second chance. The Tory believes the losers lost due to a series of social and political contingencies not because their particular project was inherently flawed. For this reason, the counterfactual argument is one of the Tory historian's most indispensable tools. In contrast to the Whig, who sees the present as the culmination of all that was good about the past, for the Tory, the present is a far from perfect world. Like the Whig she

[15]Hegel (1991)
[16] Brush (1995)
[17] Fuller (2000) (a)
[18] So called because of their being the political opponents of 19th Century British Whigs.

has to return to the archive to recover what has been lost since, post closure[19], "lost" historical projects are actively repressed, as history's winners control the recounting of *their* collective history, which becomes a narrative of *their own progress*. With her political heart on her sleeve the Tory attempts to return such repressed projects to the collective conscious by fully recovering lost narratives and illuminating their contemporary significance. A particular way in which she does this is by showing how errors or failures in a contemporary field of knowledge are explained or solved by a past historical episteme. Again this requires a return to the archives – in part to beat the Whigs and Prigs at their own game! But unlike the latter the Tory is not archivally driven in her explanations, feeling at liberty to draw on theoretical explanations across disciplinary boundaries. Drawing on one such explanation, it can be seen that, just as the patient undergoing psychotherapy often engages in *resistance* and *denial* in the face of painful memories surfacing from the unconscious, so the Tory historian is greeted with accusations of methodological incompetence, lack of professionalism, and paranoia[20] when recovering lost historical projects, or worse still, as being a "nefarious" philosopher of history![21]. In recovering homoeopathy's history I will employ medical labels in circulation at the time these crucial epistemological issues were last debated.

Homoeopathy and Allopathy-What Are They?

Homoeopathy was crystallised into a medical system in the late 18th century by Samuel Hahnemann (1755-1843), a traditionally trained physician based in Meissen, Saxony (now Germany). Hahnemann became disillusioned with his inability to cure his patients, a problem that became particularly acute in the treatment of his ten children. After withdrawing from medical practice and engaging instead in translating medical texts into one of the nine languages in which he was fluent, Hahnemann came across William Cullen's (1710-1790) materia medica and its pathogenetic description of *cinchona bark*. Recognising that the symptoms described by Cullen mirrored the symptoms of malaria, for which *cinchona bark* (quinine) was considered curative,

[19] Closure occurs when certain issues cease to be debated in the public forum. Hence, a signal of change today would be a re- emergence of the debate surrounding homoeopathy and Similia in general medical as well as public circles.
[20] Such was the conclusion of one reviewer of an article I submitted to a History journal based upon chapter five of this thesis.
[21] See White (1975) p 20

Hahnemann ingested some of the bark and recorded the symptoms he subsequently experienced. So began the first homoeopathic "proving", from the German "prufeng" meaning "to test", a means by which a drugs unique symptom picture becomes manifest when ingested by a healthy human.

Hahnemann concluded that the reason *cinchona bark* cured malaria was because the drug set up in the organism an artificial disease *similar* to the natural disease from which the patient was suffering. This similarity, combined with the former's greater strength, drove the natural disease out of the body. Hahnemann had already noted from his clinical practice that two similar diseases could not co-exist in the body and that the stronger would drive out the weaker. For example, an unresolved case of measles was often cured by infection with scarlet fever[22]. Hahnemann proceeded to "prove" further drugs known to medicine and realised that each drug had its own set of symptoms or "pathogenesis". Soon, Hahnemann had the beginnings of a homoeopathic materia medica, the challenge for the physician being, Hahnemann contended, to match the natural disease with the drug producing the most similar symptoms and thus producing a cure.

Hahnemann thus elaborated the six principles of homoeopathy. First, the law of Similia- "like cures like". This law or principle dictated that a drug producing symptoms in a healthy person would cure those *same* symptoms in a sick person. Secondly, the principle of the minimum dose meant that in all cases the smallest drug dose possible should be used in order to achieve a therapeutic effect without harmful consequences Through experimentation Hahnemann came to dilute drugs to such a degree that no material substance of the original drug was left in the diluent. This process, which Hahnemann called "dynamisation", enhanced the drug's therapeutic power whilst minimising its side effects, and was explained by him in terms of the release of energy (dynamis) from matter in the process of succussing (shaking) the remedy between dilutions[23]. This eventually led to the million, millionth dilutions and

[22] Hahnemann (1810) p 5 par 38

[23] Hahnemann explains this in The Organon (1810) p 15 and pp 188-9. Hahnemann claims he discovered this law which he described as physical but especially physiological and pathogenetic. Before his discovery Hahnemann claims people witnessed this law or "spiritualization" in the form of friction (the generation of heat via rubbing) and the magnetisation of a steel rod by rubbing it strongly in one direction with a blunt knife.

beyond, what came to be known as the "infinitesimal dose"[24]. Hahnemann also found that succussing (shaking) the drug between dilutions increased its therapeutic power. Thirdly, Hahnemann recommended "monopharmacy", where only one drug should be used on a patient at any one time. This was so that the action of the drug and its influence on the disease could be determined, something that was impossible if more than one drug was in use at any one time. Fourthly, the physician should watch carefully for any aggravation/amelioration of symptoms as a therapeutic guide. Fifthly, Hahnemann claimed that diluted drugs cured by stimulating the *vis medicatrix naturae*, or "vital force" of the body. Finally, Hahnemann established provings as a novel epistemological basis for his new system. After his experiment with *cinchona bark* Hahnemann believed the action of drugs could only be established upon healthy humans. When drugs were administered to sick individuals, the physician was unable to distinguish between the action of the drug and the course of the disease. By experimenting with drugs upon healthy humans (before the point of pathological change) Hahnemann believed, the action of the drug alone could be detected in the manifestation of symptoms. By the beginning of the 19th century he had created the beginnings of an homoeopathic materia medica, or collection of drug pictures, since, in his view, as many diseases existed as there were drug pictures to cure them. Homoeopathy was thus from the beginning characterised by a strong empirical epistemology.

By contrast "regular", or what Hahnemann came to call "allopathic", physicians operated on the basis of "rational" or "systemic" medicine. The body was often likened to a machine and physicians sought the unification of disease. For example, Friedrich Hoffman (1660-1742) explained all disease in terms of the action of the heart and John Brown (1735-1788) explained disease in terms of the excitability or atony of the organism. Hahnemann coined the term "allopath", meaning "other than disease" for his mainstream colleagues, since physicians prescribed drugs on the basis of rational systems and not on the basis of subjective symptoms. Hence, Hahnemann argued that in allopathic practice generally, no direct relationship existed between the drug administered and the disease or symptoms. At best allopaths operated according

[24] 'The Minimum Dose' was a principle or law and not simply a guide in so far as Hahnemann claimed the physician should always use the minimum amount of drug necessary to achieve an effect and that the smallest amount would produce the most favourable reaction, though initially these doses were established empirically.

to the principal of *"contraria contrariis"*, prescribing drugs known to produce symptoms *opposite* to those manifested by the sick person, so cancelling those symptoms out. For Hahnemann though, whilst *contraria* was at least a therapeutic principle, it was palliative rather than curative and should therefore never be used[25].

The Problem of Homoeopathy

The Tory historian, like her Whig counterpart, but unlike her Prig colleague, begins her narrative account self consciously, from the present. But, whereas the Whig looks to the past to legitimate the present and maintain the same direction for the future, the Tory looks to the past to resolve contemporary crises, to show where we have gone wrong, rather than what we have done right. Hence, the contemporary issues informing this narrative are simultaneously the "fall" of biomedicine and homoeopathy's increased use despite a simultaneous lack of scientific legitimacy.[26] In short, exactly how did homoeopathy challenge allopathic medicine?[27]. Were the issues raised by homoeopathy in the 19th century ever resolved? Does homoeopathy's history suggest some significant solutions to current problems in biomedicine? Can homoeopathy provide a new medical paradigm?

In answering these questions and in translating the answer into political action I face several problems. First, homoeopathy is regularly dismissed by the medical, pharmacological and political establishments as "unscientific". This is why it is important to recover the 19th century *science programme of homoeopathy*, to demonstrate that homoeopathy is not intrinsically antithetical to science, though it may currently be epistemologically disadvantaged, especially by the double blind clinical trial[28]. Also, its current metaphysical status can be seen as a result of reaction

[25] I will expand on this point in chapter one.
[26] Obviously Ivan Illich's "Medical Nemesis" comes to mind here but for a more recent, more internalist and less sociological account see James Le Fanu "The Rise and Fall of Modern Medicine"
[27] "Allopathy" is a term coined by Samuel Hahnemann to denote the conventional medicine of his day and is derived from the Latin "allo" meaning "other" and "pathy" meaning "symptoms" indicating that in his view allopaths used drugs in disease that bore no relation to the disease (symptoms) whatsoever- thus literally 'different from disease.' See S Hahnemann 'The Organon' (1982) p 24
[28] A recent conference I attended at the University of Durham entitled 'The Tensions in Social Statistics' sought to explore the implications of complexity theory for evidence based medicine One interesting fact to come from this conference was the re-emergence of case studies as significant in evaluating medical efficacy. Historically speaking, such a turn in medicine can only work to homoeopathy's advantage.

formation, taking on a form in complete contrast to a previous incarnation as a survival strategy: the homoeopathy of the 21st century is very different from that of the late 19th century. Secondly, homoeopaths themselves are unaware of their own historical legacy. But even if their awareness increased, most would disassociate themselves from it. Hence the homoeopathy I am recovering in this thesis no longer exists and the science it could have spawned has never materialised. The homoeopathy of the 20th and 21st centuries bears little resemblance to its 19th century incarnation. Thirdly, the historiography of homoeopathy suffers from the "historical amnesia and political inertia"[29] usually associated with the history of science, and like this discipline, serves to militate against a change in future policy direction. It is the purpose of this thesis to restore this memory loss by a significant return to the archives and suggest a future policy change.

The above three socio-political problems for homoeopathy are underscored by five historiographic problems within the Academy. First, history of medicine shares the same whiggish tendencies as the history of science of the recent past. This not only leads to linear tales of tasteless triumphalism, but it means certain questions are not even asked, let alone answered. In history it is often what is *not* said that is most significant[30].

Secondly, this whiggishness leads to archival negligence, so that historians focusing on mainstream medicine comment on homoeopathy either without sufficiently researching homoeopathic sources, or they become over reliant upon secondary sources. Without *appropriate* attention to primary homoeopathic *clinical* sources inaccurate generalisations are made- homoeopathy was not "scientific", was "metaphysical", was "anti-thetical to pathology, physiology" and notions of "progress", was incompatible with public health and vaccination, was diagnostically

[29] Fuller (2000) (a) p 318

[30] Nancy Tomes is a case in point. In 'The Gospel of Germs' (1998) Tomes recounts the death of Martha Roosevelt, wife of philanthropist Theodore Roosevelt Senior, from typhoid fever, 'the filth disease', in 1884. The historical dilemma for Tomes centres around the fact that, though Martha Roosevelt was known for her fastidious cleanliness, adopting an exacting regimen in her household of polishing, scrubbing, cleaning and dusting, she should succumb to "the invisible agents of disease" (p 25) Rather, Tomes question should be, since the etiology of diseases like typhoid was attributed to germs and since such germ free people succumbed to the disease whilst other 'germ ridden' folk did not, why did the general public not question the veracity of germ theory? Why did they not consider it based on a fallacy when the pattern of disease did not conform to the theory's predictions? In short, how could clean people contract typhoid?

ignorant etc. This is in part a product of the history of the discipline of the history of medicine itself and I will address this issue further in the conclusion.

Where historians have used primary documents, these have usually been allopathic, and they have often failed to go beyond much of the rhetoric in these documents.as they have concentrated on what physicians *said* they were doing rather than at what they actually *were* doing. In turn, Prigs have made their own rhetorical moves. Just as failed natural philosophers are portrayed by historians of science as "philosophers" rather then "scientists" pursuing an alternative trajectory, so failed medical systems, such as homoeopathy, are represented in historical narratives as "alternative *therapeutic*" rather than "scientific" systems[31]. In general, "drugs" become "remedies", "doctors" become "physicians" or simply "homoeopaths", and "theories" becomes "philosophy". In addition to these rhetorical strategies, Prigs often use the preferred Tory method of comparative analysis as a "first order" alternative to appropriate archival research[32]. In short, a comparison at the level of secondary sources is considered adequate, or a token number of primary documents are compared with others already collated and analysed by a previous historian The Tory, on the other hand, insists that comparative analysis should be conducted at both the first order of the archives and the second order of explanation. That is not to say that the comparison has necessarily to be equal in weight. In this thesis, I use a comparative methodology, not by devoting equal attention to homoeopathy in the U.S. and Britain, but by comparing key aspects of homoeopathy in those different contexts. Such a selective comparative methodology parallels the natural experiment by highlighting the contingent factors in differential developments, or put simply, that what existed in one organisational or national setting was absent in another. Thus, I suggest that homoeopathy had the potential to develop as science in the U.S., and only in the U.S, since it came closest to producing a "research community" of a significant size. However, American homoeopaths had an overly empiricist epistemology which,

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[31] Steve Fuller (2000) (a)

[32] Both Dinges (2002) and Rogers (2002) (found in Dinges) do this. Interestingly Roger's does acknowledge that homeoopaths saw themselves as part of the exciting new world of bacteriology in the 1870s and 1880s and details (failed) attempts to establish clinical research centres and journals. However, the idea that this may have worked is never seriously entertained and the reasons why it didn't are put down simply to the fact that homoeopaths had a therapeutic image. The whole issue is dealt and dispensed with in less than two pages. See pp 353-354 subheading 'The Homoeopath in the White Coat'.

in turn, gave little latitude for discounting error, something homoeopaths in Britain and Germany accomplished fairly easily. Such a failure led to infinite error and data incorporations and, eventually, to a decline in provings, the cornerstone of homoeopathic epistemology. Only by such direct comparisons can the significance of error elimination, for example, be revealed.

Where primary documents *are* prioritised by historians, Whigs use them selectively so as to see the present in the past, whilst Prigs confuse the excess of documents produced by the winners of history with the historical significance of those documents bearing in mind that "documentation testifies, in the first instance, to what leaves an impression on the impressionable"[33]. Clearly even here less can be more and one of the principal aims of this thesis is to give voice to the minority and repressed rather than the dominant historical voice.

Thirdly, this leads to homoeopathic achievements being chronically underestimated and its marginalisation perpetuated in the minds and work of historians. Fourthly, differences between homoeopathy and allopathy are magnified so as to reinforce accounts of inevitability. Fifthly, Internalism still pervades most narratives as it is implied there always was (and is) something intrinsically "wrong" with homoeopathy. Paul Starr's sentiment typically incorporates all five problems when he claims that regular medicine was producing important and demonstrable scientific advances whilst homoeopathy was generating nothing new and that homoeopathy was both modern and mystical[34]. A more panoramic sweep of the medical scene, of course, shows simultaneously that whilst allopathic medicine was also vitalistic, homoeopathy was innovative.

Consequently, my own narrative will take the form of an Organicist mode of argument with a dual emplotment; Comic on the macro level and Tragic on the micro level, leading to Conservative and Radical Ideological implications respectively. Like other historians I will motif bacteriology transitionally but to a different end. Unlike other historians I will use homoeopath's experiments of the 1870s as my inaugural motif and Progressivism's zenith as my terminating motif. I raise alternative

[33] Fuller (2002) p 399
[34] Starr (1982)

individuals to heroic status whilst dismissing others. I focus in particular upon the activities of the homoeopath Conrad Wesselhoeft (1834-1904) Professor of Materia Medica and Therapeutics at the Boston University School of Medicine during the last quarter of the 19th century. Wesselhoeft in my view was one of the foundations stones of the homoeopathic scientific research programme. Interestingly, Wesselhoeft is omitted from all the narratives dealing with homoeopathy's history except that of Kirschmann[35]. Even in Julian Winston's historical biographical work detailing the lives of homoeopaths of all "distinctions" during the 19th century principally in America, Conrad Wesselhoeft is *omitted completely* (though William Wesselhoeft (1794-1858) and his brother Robert are included)[36]. This is significant. From the point of view of homoeopathy's potential as a scientific research programme, and certainly from the point of view of it receiving academic legitimation, Wesselhoeft was undoubtedly one of the most important figures in 19th century homoeopathic medicine[37]. It is testimony to the utter failure of the homoeopathic scientific research programme that Wesselhoeft is omitted, even by historians of homoeopathy.

I will argue that allopathy came to adopt, through the language of bacteriology, the very practice and theory of homoeopathy it had a few decades previously vilified[38]. In the spirit of a Nietzchean revolution allopaths incorporated *both the practice and the spirit of homoeopathy*. Thus in my Tory historical narrative the Romanticism and

[35] Kirschmann (2004)
[36] Winston (1999).
[37] The life of Conrad Wesselhoeft could well be the subject of further research. Just to add to the confusion there were two Conrad Wesselhoefts who were American homoeopaths. The first Conrad Wesselhoeft (1834-1904) was the nephew of William Wesselhoeft (1794-1858),co-founder of the Allentown Academy of Homoeopathic Medicine , Pennsylvania with Constantine Hering (1800-1880) in 1835. William was educated by the philosopher Goethe and was a student of the Universities of Berlin and Wurzburg. He obtained his M.D. from the University of Jenna in 1820 and emigrated to U.S. shortly after. Impressed by homoeopathy's scientific origin William became a homoeopath shortly thereafter and successfully treated scarlet fever "the terror of Boston" (Kirschmann 2004 p 31) gaining him a favourable reputation with many mothers and members of the city's most prominent families. Together with his brother Robert, William also founded the Brattleboro' Water Cure centre in Vermont. set up Conrad was a long standing friend of Louisa May Alcott who attributed her ill health to mercury taken as a cure for typhoid fever in the 1860s epidemic. Nan in 'Jo's Boys' is said to epistomise the 19th century homoeopathic physician. Nan was portrayed as bright, scientifically minded young girl (Kirschmann cannot help but put the latter designation in quote marks!), independent, and dedicated to women's rights. Nan treated one of Bhaer's two sons who had received a bite from a mad dog with homoeopathic medicine Alcott dedicated the book to her "friend and physician" Conrad Wesselhoeft. A second Conrad Wesselhoeft (1884-1962) was also a prominent Boston homoeopath and a 1911 graduate of Harvard Medical School. He is presumably a son of Conrad Wesselhoeft Snr. but I have been unable to establish this. He certainly appears to have epitomised a new generation of homoeopaths in the first two decades of the 20th century who sought conciliation with allopathic medicine.
[38] This is dealt with in chapters four and five of this thesis.

Formism of the Whig, and the Satire and Contextualism of the Prig, give way to a Tragic emplotment on the micro level and a Comic emplotment at the macro level of explanation, coupled with an Organicist formal argument[39]. Hegel of course used this particular modal arrangement and my narrative has several Hegelian overtones. First, my narrative effect is achieved by *looking for the similarities,* and not the differences, between allopathy and homoeopathy. This is the reductive and integrative move characteristic of Hegel and Organicist arguments in general. I select as an inaugural motif the experimentations and microscopic investigations of the 1870s when homoeopaths attempted to place their medical practice on a more scientific epistemological footing. Secondly, I will show how a *synthesis* (albeit imperfect) occurred at the turn of the 20th century between homoeopathy and allopathy (this is in keeping with Hegel's thesis/anti-thesis/synthesis formulation). This is in opposition to the view of most historians who have, at best, credited homoeopathy with "influencing " allopathic medicine- mainly in the form of burying heroic therapy- whilst "bastard homoeopathy"[40] did its own share of the borrowing from allopathy. I will argue that a *partial* and *imperfect reconciliation* occurred between two *seemingly opposed* systems of medicine by focusing my analysis on what they actually practiced. Thirdly, homoeopathy at the end of the 19th century provided a therapeutic environment in which the bacteriology of Pasteur and Koch could flourish and thus was pivotal in defining the *telos* towards which medicine at that time was heading: smaller doses based upon symptom similarity. But for several contingencies, which include homoeopathy's handling of error and its elective affinity with Progressivism, I will argue that homoeopathy could have become the dominant form of medicine from around the 1870s. Of course it would not have been known today as "homoeopathy" but as simply "scientific medicine". In the 19th century homoeopathy was not "alternative medicine" but part of "science". Fourthly, I use the Hegelian microcosmic-macrocosmic relationship in my explanation of homoeopathy's demise[41]. Just as Hahnemann taught that two similar diseases could not co-exist in the body, but that one would drive the other out, so I will show how homoeopathy and allopathy, with their eventual similarities, could not co-exist for long.

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[39] I explain this in detail below in this chapter.
[40] Those using low dilutions only.
[41] Thanks to Steve Fuller for first suggesting this explanatory possibility.

Because Hegel emplotted on two levels, as White points out, his narrative can be interpreted as having *either* a Radical or Conservative ideological implication[42]. Similarly, on the microcosmic level my emplotment is Tragic. Thus, I argue that homoeopathy's demise at the turn of the 20th century was an avoidable tragedy for medicine. However, simultaneous emplotment on the macro level of my narrative allows me, like Hegel, to maintain a notion of "reversibility" in history. The *telos* of Reason to which the "Idea" in history strains necessitates the resurrection of abandoned historical trajectories that just won't go away. For Reason or Rationality demand Universality. The true is able to vanquish the false, for all time and in all places. The fact that homoeopathy persists and even more importantly, the fact that its principles remain essentially unchanged after two hundred years, testifies to its potential in realising the "Idea" in history.

I will argue, in agreement with other historians, that the "Idea" towards which the history of the late 19th and early 20th centuries was moving was indeed "science" but that the form that science would take in medicine (and perhaps elsewhere) was open to negotiation. This argument puts me at odds with most historians. The turn of the 20th century represented only a partial resolution. This is evidenced by the return of 19th century epistemological and methodological crises to contemporary medicine. Thus, historical recovery is justified on the basis of Hegel's claim that:

"The life of the ever present Spirit is a circle of progressive embodiments, which looked at in one aspect still exist beside each other, and only as looked at from another point of view appear as past. The grades which Spirit seems to have left behind it, it still possesses in the depths of its present"[43].

Hegel cautioned against seeing changes in the manifestation of the Spirit in any age as merely representing a return to the same form. Rather *apparent* regressions should be seen in terms of Spirit's " [...] manipulations of itself, by which it multiplies the material for future endeavours- we see it exerting itself in a variety of modes and

[42] Interestingly, White puts this choice of interpretation down to the different emplotments used by Hegel at the microcosmic and macrocosmic levels- Tragic and Comic respectively. This may account for Poppers repulsion at the conservative overtones of Hegel's work, so offensive to his own project of "critical rationalism", where others have managed a Liberal reading. See Fuller (2002) p 406.
[43] G W F Hegel (1991) p 79

directions"[44]. Thus Hegel saw history not as linear and unidirectional but as organically developmental and synthetic. The implication here is that history will sometimes appear to "go back on itself", integrate into itself that which was previously abandoned in its imperative toward universality. The all pervading spirit, in this case rationality in the form of medical science, (Hegel's focus was on the Spirit's manifestation in nations), seeks to attain a conception of itself, a consciousness of what its work is. Its striving is for unity. It is independent and continually seeks manifestation through consciousness. It is the Tory prerogative to promote such awareness and return the repressed to consciousness.

Outlining A Tory History of Homoeopathy's Past

In Chapter One, I review the major literary contributions to this field and show the extent to which history has forgotten homoeopathy. In Chapter Two I will show the extent of the similarity between homoeopathy and allopathy at the turn of the 20th century so essential to the Tory mindset. I will also show how homoeopaths engaged with science, not as something it had to "confront", to quote Naomi Rogers, but as something it was trying to *construct*[45]. Whereas it is traditionally considered the case (and semantically accurate!) that "homoeopathy" means the treating of diseases with substances causing *similar* symptoms and "allopathy" with substances *unrelated* to symptoms, I will show that homoeopaths and allopaths were engaged in almost identical practices by the turn of the 20th century and that homoeopaths used the new sciences and medical technologies of their day. However, when Samuel Hahnemann constructed the neologisms "allopathy" and "homoeopathy" at the end of the 18th century they were accurate descriptions of the medical philosophy and practice of the two groups of physicians. Throughout this thesis I will employ these terms since they indicate a parity that the designations "orthodox" and "regular" make impossible. This, in turn, makes it easier to consider the possibility of "homoeopathy as science". Homoeopaths themselves considered their practice the only scientific form of medical therapeutics, based as it was upon the Law similia similibus curentur- let like be cured by like- and that their victory over allopathy was only a matter of time. I will show

[44]Hegel (1991) p 73

[45] Naomi Roger's (1998) account is dealt with in detail in chapter one of this thesis. Rogers claims homoeopathy had to "confront" science.

that homoeopathy was not, and is not, antithetical to "science". Throughout this thesis I shall define "science" broadly in terms of *Wissenschaft*- the systematic pursuit of knowledge- rather than as an activity performed in certain institutional settings, or, as an activity associated with a particular methodology, though I consider it to have a distinctly empiricist approach[46]. Steve Fuller has made the existential point that there is nothing intrinsically methodologically similar between scientists in different fields, for example in the activities of physicists and biologists[47]. Whilst the former engages in laboratory- based activity, screening out the idiosyncrasies of the everyday world, the evolutionary biologist analysing fossilised remains in their natural habitat, searches out those very features which are distinctive. In the context of the history of medicine, James Le Fanu has recorded the ad hoc way in which many of, what are now regarded as, the greatest triumphs of 20th century bio- medicine, were developed[48]. The Whig tale of steady progress according to an agreed and systematic methodology in a standardised institutional setting is far from the reality of biomedicine's development. Hence the history of allopathy's victory over homoeopathy is both more complex and contingent than extant accounts allow.

Further, I suggest that the1870s was a crucial decade for homoeopathy, a time when it was more scientific both in terms of its technologies and theoretical rationales, as well as its systematic experimental attempts at cumulativeness, than allopathy. In Chapter One I highlight the different definitions of medical science held by educators, practitioners, and researchers and no doubt by the public in the latter half of the 19th century in Britain and America. From chemistry to the Parisian school to physiology and pathology, to bacteriology physicians and others at one time or another considered all these activities to constitute "scientific medicine". Homoeopathy was thus simply another contender for the scientific accolade.

In Chapter Three I will begin asking the question, if homoeopathy didn't fail because it was unscientific or ineffective medicine what accounts for its demise? This chapter will look at the differential responses of homoeopaths and allopaths in both Britain

[46] That said, I do allude to the institutional settings within which homoeopathy both was and could have been conducted in. I also note that what is now considered "scientific methodology" in medicine was practiced by 19th century homoeopaths to an extensive degree.
[47] Fuller (1997)
[48] Le Fanu (1999)

and America to error, particularly in the 1870s, as a possible factor. Further, using the typology devised by David Bloor based on the work of Mary Douglas and Imre Lakatos I will note differential responses to error and suggest possible organisational differences between homoeopaths and allopaths may be found upon further research. I will ask how these differences may have affected the development of their respective knowledge bases[49].

This analysis will be expanded in Chapter Four by looking at the universes of meaning that homoeopaths and allopaths held at various points in the latter half of the 19th century. Using the social constructionist approach of Berger and Luckmann I will focus on the failure of homoeopaths to explain allopathic successes in terms of the homoeopathic world –view and ask why this failure occurred

Chapter Five signals a shift from historiography and theory to clinical evidence. I use the understanding and treatment of tuberculosis by allopaths and homoeopaths as an empirical illustration of the theoretical and practical nihilation of homoeopathy by allopathyat the turn of the 20th century. In particular I highlight how allopaths incorporated the homoeopathic theories of similia and the minimum dose, how language was important as a demarcatory strategy and how such language differences masked commensurability between homoeopathic and allopathic world-views.

Chapter Six is based upon a detailed reading of Berger and Luckmann[50]. Concentrating upon the American scene at the turn of the 20th century, I attempt to show how in its ideological orientation homoeopathy showed a greater resonance with the Progressive movement than allopathy and that this ideological resonance with the Federal State over the corporations ultimately worked against homoeopaths.

Finally, in the Conclusion I show how the archival material I have recovered addresses these historiographical issues. A fuller recovery of homoeopathy's history permits me to motif events differently. Hence, I highlight the science programme of

[49] The four groups being homoeopaths and allopaths in the UK and US.
[50] Berger and Luckmann (1991) are considered by some to be too 'idealist'. However, Berger and Luckmann do make significant allusion to the power struggles of various groups operating "behind the scenes" in conflicts of ideas so that the resolution of the struggle between historical is instrumental in resolving disputes over ideas. See in particular Part Two, Chapter Two of this thesis.

homoeopaths, using as my inaugural motif Wesselhoeft's experiments of the 1870s, my transitional motif becomes homoeopaths' failure to handle error effectively, and my terminating motif is the defeat of the American Progressive movement by the corporate elite. That homoeopathy became marginalised for other than clinical reasons is made clear[51]. That is has a future is strongly argued. I outline what I consider to be some of the current problems in biomedicine and indicate how a resurrection of the issues homoeopathy raised in the 19th century would facilitate a resolution of these issues. These issues have remained buried both because canonical histories are traditionally written by the winners of history, and because of the history of medicine's own history. .

[51] For the therapeutic successes of homoeopaths around the world see in particularly chapters four and five of this thesis for tuberculosis, chapter five of Coulter (1973) for Yellow Fever, and chapter five of Squires (1985) for cholera.

Chapter One

The Nature of the Field.

In this chapter I will briefly outline the 18th century development of homoeopathy and trace the historical origins of the terms "homoeopathy" and "allopathy". I will then review the principal literary contributions to the history of homoeopathy, focusing particularly upon those secondary texts which deal with homoeopathy's history in the US in the 19th century, using Britain for points of comparison. I will focus upon those texts that address issues around "science", those that attempt to explain homoeopathy's demise and those that are historiographically self –conscious[1]. I suggest there exists an institutional bias against homoeopathy's representation as science within the Academy, the history of medicine perhaps representing one of the last vestiges of the Whig historians' empire. My argument is that recovering homoeopathy's scientific past is essential for a fuller understanding of the history of medicine, and for explaining homoeopathy's marginalisation in this development. In keeping with the Tory historiographical framework within which this thesis is constructed I claim homoeopathy's 19th century scientific research programme offers a possible future trajectory for medical science.

Historians as Underlabourers for the Winners of History: Constructing Homoeopathy's Past.

Despite opposition from allopathic physicians homoeopathy began to spread throughout Europe. It arrived in Britain in 1827 with Frederick Foster Harvey Quinn (1799-1878) and America in 1825 with Hans Burch Gram (1787-1840). Both men learned about homoeopathy whilst in Europe[2]. After a late 19th century zenith and early 20th century repression in both countries homoeopathy began to break through into the collective conscious once more in the 1960s[3]. This was a time when

[1] By this I mean those that are explicitly aware of some of the historiographical issues that relate to the construction of their own narratives and the construction of homoeopathy's history generally.
[2] For more on this see Winston (1999) and chapter two of this thesis.
[3] Kaufman (1971) and (1988)

biomedicine was at a peak in its achievements[4]. With a wide range of penicillin preparations and other drugs, successes in open heart surgery and kidney transplantation, the prospect of an imminent cure for childhood cancer, the virtual elimination of many infectious diseases and increasing technological innovations, the march of the progress of science seemed limitless. Yet at the same time there was an acknowledgement that all was not well. In 1978 Professor Colin Dollery entitled his Rockefeller Carling Fellowship Monograph "The End of an Age of Optimism" in which he described his conviction that the march of medical progress had come up against some invisible barrier[5]. Problems seemed larger, he said, and solutions more elusive. The morality and cost-effectiveness of many interventions was being questioned and even senior members of the medical research hierarchy doubted the claims of future advance. A year later James Wingaarden, President of the American Association of Physicians in Washington DC, noted in his address "The Clinical Investigator as an Endangered Species" the lack of medical students pursuing research careers. The following year it became apparent the pharmaceutical industry was in trouble. Nature magazine commented on the dearth of new clinical drugs, these having declined from around seventy new drugs per year in the 1960s to only thirty per year by 1971. Indeed, many of the "new" drugs introduced in the 1970s were claimed to be expensive replacements for cheaper and equally effective forbears[6]. Finally, in the mid 1980s the Medical Annual, a prestigious medical journal traditionally dedicated to relaying to surgeons and family doctors the latest developments in medicine, went out of circulation[7]. In this context, homoeopathy began to re-emerge as part of "New Age" medicine.

Allied to these developments were changes in the focus of medical historiography within the Academy from clinical to social history. These changes were reviewed recently in relation to the work of the sociologist Paul Starr[8]. The American historian John Warner, as a Prig and from the vantage point of 2004, criticised Starr's 1982 work for its grand narrative status and omission of key medical actors such as patients

[4] Le Fanu (1999) pp 241-245
[5] Nature Medicine (1995) and Clinical Pharmacology and Therapeutics (1991) cited in Le Fanu (1999)
[6] Nature Medicine (1995) and Clinical Pharmacology and Therapeutics (1991) cited in Le Fanu (1999)
[7] Le Fanu (1999)
[8] Warner (2004)

and government agencies. Warner claimed Starr's work was too "doctor centred" and bucked the trend of social history fashionable at the time[9].

As well as a difference of agenda between sociologists and historians, as in the above dispute, the 1970s and 1980s witnessed a battle between traditional medical historians (Whigs), who complained professional historians were writing medical history *without medicine*, and professional, social (and younger) historians (Prigs) who accused traditional historians of writing medical history *without people.* In such a post modern climate prig narratives came to dominate, a development not in homoeopathy's favour. This combined emphasis upon the *social* history of medicine and de-emphasis upon the role of physicians, whilst no doubt timely and welcome in terms of allopathy's history, led to a *neglecting of medical clinical texts as primary sources.*

At the same time a recovery of homoeopathy's history began with Joseph Kett in 1968, Martin Kaufman in 1971 and William Rothstein in 1972. Misleading conclusions regarding allopathy's ascendancy and homoeopathy's decline ensued in these narratives as historians eclipsed clinical sources. With the partial exception of Harris Coulter in 1973 and Mark Weatherall (much later) in 1996 and in a more limited way, Naomi Rogers in 1998 and Anne Taylor-Kirschmann in 2004 this is a situation that continues, so that the clinical practices and "science" of homoeopathy continue to be overlooked, surviving only in some subliminal, repressed state. Thus, homoeopathy's current marginalisation in medical science appears in the Academy, not as historically constituted and contingent, but as the inevitable consequence of the outworking of progress.

Such historical misrepresentation is primarily constructed in three historiographical areas: the problem of language, the putative incommensurability of homoeopathy and science and archival negligence. I will address each of these in turn.

[9] Starr (1982) no doubt sensed this historiographical sea change and entitled his work accordingly i.e. The *Social* Transformation of American Medicine, but this led ultimately to even greater ire on the part of the prigs since the narrative did not fulfil the title.

The Problem of Language

Language is more than a rhetorical tool. It not only describes but constructs what we are able to know and do[10]. Hahnemann himself recognised the power of language to define, limit or expand knowledge when he coined his own neologisms "homoeopathy" and "allopathy" in the late 18th century. Roy Squires, whose thesis investigated the development and marginalisation of homoeopathy in Britain, showed how allopaths in Britain demonised homoeopaths as "quacks", agreeing with Warner that homoeopaths were often derided as "mere empirics"[11]. The historian must remain acutely aware, therefore, of the rhetorical nature of much medical language in primary documents. As Warner cautions, historians "[...] need to connect [physicians] rhetoric in medical journals, textbooks and ceremonial orations with what they actually *did* at the bedside"[12]. But I argue that even this does not go far enough. Historians routinely take the language of allopaths to be descriptive rather than normative.

One particularly problematic area is the terminology historians use to describe "homoeopathy" and "allopathy". Robert Juette (1998) is more reflexive than most in his suggestion that historians should be careful in using the term "alternative medicine... [as]...there is the risk of approaching 19th medicine anachronistically"[13]. Juette rightly points out that the terms "alternative", "complementary" and "orthodox" are value laden; the value is the words referent[14]. However, he limits his claims when he cites Roger Cooter's view that homoeopathy and hydropathy may have been seen in the 19th century, not as "alternatives," but as just *different from scientific medicine.* The problem is Juette, like other historians, does not explain what he takes "science" to be, from which homoeopathy differed[15].

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[10] Howe (1978) p 380.
[11] Squires (1985) Warner (1997) p 44.
[12] Warner (1997) p vii
[13] Juette (1998)
[14] Juette (2001) By which he means these terms are value laden rather than value neutral and are defined in relation to something else. Which is considered normative or mainstream.
[15] Its worth recalling the introduction of the term "scientist" into the English language by William Whewell (1794- 1866) Anglican priest and Master of Trinity College Cambridge in the 1830s to describe a newly established professionalised social role emerging in the universities. Whewell was keen for the universities to be seen as guardians of an intellectual tradition that amateur inventors had apparently implicitly mastered. With its obvious priesthood parallels, Whewell intended for scientists to be seen as explainers of the mysteries of innovation just as priests revealed the mysteries of invocation.

Despite his self -conscious use of the comparative method to illustrate the differences between hydropathy and homoeopathy, Juette still uses the term "alternative medicine" to group hydropathy, homoeopathy and other therapeutic systems together. This term in facts acts as a residual category for all non-biomedicine and masks the great differences between these various practices. Like other historians Juette concludes medical sectarianism had a decisive impact on German medicine[16]. He claims ritual comfort was found by allopaths in affirming their belief in "scientific principles", thus linking German allopaths to their U.K., U.S., and French colleagues.[17]. Thus language cannot be taken as a simple or necessary reflection of medical practice, but its rhetorical use in the construction and reinforcement of identity and knowledge boundaries in a time of crisis and change must also be considered.

Language also poses a problem when it comes to representing "mainstream", "orthodox" or "allopathic" medicine. Many historians prefer the term "regular" to "allopathic" as if the former is neutral, but perhaps partially justifiable due to their greater numbers in the medical field[18]. But "regular" is problematic: my archival research shows that the term "regular" was a label allopaths *attached to themselves* as a badge of respectability[19]. The Transactions of the A.M.A of 1877, for example, claimed that the A.M.A. was the only body representing the "[...] entire regular medical profession"[20]. Bearing in mind that the Consultation Clause prohibited any homoeopath, eclectic, or practitioner of any other "system" from membership, this phrase was clearly intended to represent allopaths *only*. The A.M.A Committee on Indigenous Medical Botany reported in 1847 that "regular physicians" were generally ignorant of the medicinal plants that existed in their own localities and encouraged the greater familiarity of their members with such[21]. Joseph Toner in his presidential address to the Association in 1874 congratulated the Massachusetts Medical Society for "[...] lopping off all irregular practitioners who by various pretexts sought to fasten themselves upon it" and that a long term solution was to "improve the medical

[16] Kett (1968) Kaufman (1972) Rothstein (1972) and Coulter (1973).
[17] Squires (1985)
[18] Kett (1968), Kaufman (1972), Rothstein (1972), Rogers (1998), Kirschmann (2004)
[19] Homoeopaths referred to allopaths either as "allopaths" or commonly as the "old school". Clearly, this latter term had a distinctive rhetorical overtone.
[20] Transactions of the American Medical Association (T.A.M.A) (1877) p 188
[21] T.A.M.A (1848) p 342

education, skill and availability of regular medical men [...]"[22]. Thus the term "regular" is not a value neutral, descriptive term which historians can use without ideological overtones to refer to allopathic physicians. Rather, it was the preferred term 19th century allopaths applied to themselves. They objected to the label "allopath" since it was coined by Hahnemann and came to have negative connotations in the 19th century. It also suggested parity between competing medical systems.

Homoeopaths were aware of, and raised objections to, such normative allopathic labelling in 1881 when the Institute's president J.W. Dowling noted that when challenged to define a "regular physician", the editor of the Medical Record, one of the most popular "old school" medical journals conceded that the A.M.A. had always failed to define exactly what "regular" was. The homoeopathic editor noted the A.M.A. Code of Ethics was silent on the subject but that allopaths described a *non* - regular physician as one "[...] whose practice is based on an exclusive dogma, to the rejection of the accumulated experience of the profession, and of the aids actually furnished by anatomy, physiology, pathology or organic chemistry [...]" and that such did not "[...] strictly apply to a large proportion of the so- called homoeopathists of this country. As the homoeopathic colleges teach anatomy, physiology, pathology, and organic chemistry, it is hardly to be supposed that their graduates reject these aids in actual practice"[23].

Hence, both allopaths and homoeopaths in the 19th century recognised the term "regular" had rhetorical and ideological overtones. As a demarcatory linguistic device it facilitated the labelling of homoeopaths as the "other"[24].

Throughout this thesis, then, I use the term "allopathy"[25]. The term "allopath" does describe how physicians regularly practiced i.e. administered drugs which bore no apparent relationships to the patient's symptoms. In all the narratives herein discussed, selection of the term "allopath", "orthodox", "regular" or "conventional"

[22] T.A.M.A. (1874) pp 75-77.
[23] T.A.I.H. (1881) pp 22-23
[24] This also allowed the separation of allopaths from hydropaths, mesmerists, herbalists and other medical practitioners of the 19th century, though of course hydropathy was adopted by a significant number of allopathic physicians. See Bradley and Dupree (2003)
[25] Coulter (1973) Nicholls (1988)

denotes a definitive political position, self consciously or not, adopted by historians in relation to homoeopathy.

The decision by some to adopt the term "alternative" in reference to homoeopathy is based upon a commonly held misunderstanding that "allopathy is synonymous with the Galenic theory of 'contraria contrariis'"[26]. Hahnemann *did not* define "allopathy" as the production of opposite symptoms though he did acknowledge that contraria contrariis at least bore a *relationship* to the disease presented. Rather "allopathy" represented a relationship of *different than symptoms.* In section 22 of The Organon, Hahnemann explained:

"*In addition* to these two possible modes of treatment [the modes of similars and opposites] there is a third, the allopathic method, which prescribes medicines having symptoms with no direct pathic relationship to the disease condition, symptoms neither similar nor opposite but *completely heterogenous*"[27] (italics added).

And;

"the only thing in allopathic therapy that has any evident relationship to a portion of the symptomatology of the disease [...] In truth the opposite of the right one"[28]. It was a method involving "[...] massive doses of violent drugs of unknown action *chosen upon mere conjecture* [...]"[29] (italics added), Hahnemann adding " it should be scrupulously avoided if one does not wish to deceive and mock the chronically ill."

Hofstra is the only historian I have found that defines "allopathy" correctly[30]. Other historians justify their use of the terms "regular" and "orthodox" on the basis of current power relations within medicine. Gevitz for example claims his use of the term "unorthodox" over "alternative" in referring to homoeopathy since the latter, being a more value neutral expression, "[...] does not sufficiently fix the phenomenon

[26] Rogers (1998)
[27] Hahnemann (1810) p 24
[28] Hahnemann (1810) p 24 par.22
[29] Hahnemann (1810) p 25 par 22.
[30] Hofstra (1993)

in terms of its contemporary medical repute"[31]. I argue this is the very error historians should be trying to avoid.

Such Presentism in the literature, projecting as it does the present back onto the past, often manifests itself in the "New Age", pseudo religious language used to describe homoeopathy [32]. Stow Persons's narrative on the Regents' resistance to change and the decline of homoeopathy at the University of Iowa after 1876 represents one example of this. Persons describes the "high potency" homoeopathic contingent of the university as a "cult", students as "solemnly" contemplating Hahnemann's concept of the psora as chronic (long term) disease, whilst simultaneously being subjected to "ritualistic" readings of the Organon[33]. Thus, homoeopaths are portrayed in his narrative as more brainwashed than well educated, more religious than scientific, more sectarian than progressive.

How Homoeopathy is made Incommensurable with Science

Historians have a hard time perceiving homoeopathy as scientific. A contributory factor, and one suggested in the last section, is that historians seem to conceptually prefigure "science" in monolithic, hegemonic terms. They rarely define the science they are talking about. Contenders for science in historical narratives include laboratory based bacteriology [34], pathology (including cellular), physiology and anatomy [35] (or all of these[36]), Parisian medicine[37] and Serum Therapy. [38] It is often unclear whether the historian *herself* is perceiving an activity or body of knowledge as science or describing the perception of *physicians* in a particular era. Then again, what makes this particular activity a science- Its method? Its theoretical status? Its

[31] W.F Bynum and Roy Porter (1993) p 603
[32] Persons (1991).
[33] Persons (1991) p 84 and p 78 The University of Iowa established a mixed medical school in 1876 where homoeopathic medical students received training in the 'non controversial' fields from the medical faculty but were not examined before the faculty of the Medical department, thereby protecting them from hostile instructors. The medical educational standards of the Iowa programme were particularly low, a fact recognised by the Dean of the homoeopathic programme Allen C Cowperthwaite, who laid the blame in part on the regents' resistance to changes that would increase costs, jeopardise enrolments and reduce income from student fees
[34] Rothstein (1972)
[35] Bynum (1994) p 222
[36] Kirschmann (2004)
[37] Warner (1997)
[38] Worboys (1992)

predictive power? Its political, economic, intellectual or institutional support? Its results?

Rothstein's Internalist and Whig history of physicians in 19th century America suggests that allopaths were not any more scientific than their homoeopathic or eclectic counterparts[39]. Rothstein denies that; "[...] a direct linear progenitor of scientific medicine can be traced to a single group of medical practitioners [...]". Rothstein concludes that "science" *gave rise to medical institutions of a particular type* rather than institutions giving rise to a (medical) science of a particular type. Social change was thus knowledge driven. In support Rothstein quotes allopath G.M.B. Maughs as stating, "Now, through the improved means of diagnosis, positive knowledge has taken the place of vague guesses or even probable surmises .Now [doctors] agree because the fact is almost every case is capable of demonstration."[40]. Rothstein accordingly concludes, "Many aspects of medicine now rested [at the turn of the 20th century] on demonstrable scientific proof, and science, not faith, was to be the arbiter between the valid and the invalid." and that, "These objective standards permitted certification of medical schools and physicians on a uniform basis, which in turn eliminated the justification for sectarianism in medicine."[41]

Not only is it unclear whether Rothstein is referring to science as laboratory- based bacteriology or a particular empirical medical epistemology (or both), but when Maughs presented the above sentiments to the Missouri State Medical Association in 1879 *very little* was "demonstrable", even in bacteriological terms: only anthrax and fowl cholera bacilli had been demonstrated by Koch in 1876 and Pasteur in 1879 respectively. The tubercle and diphtheria bacilli were in the future, 1882 and 1890 respectively, as were any effective therapeutic remedies for these diseases. Therapeutics fared little better with William Osler's 1892 work "The Principles and Practice of Medicine" confessing to the utility of only six treatments in a discussion of forty-two infectious diseases. Such reflected the sceptical, expectant allopathic therapeutic approach characteristic of that time. Drug therapy was at an all time low in medical practice at this time. Allopathic physicians recognised the curative capacity

[39] Rothstein (1972)
[40] Rothstein (1985) p 323
[41] Rothstein (1985)

of the *vis medicatrix naturae* and considered good therapy to support rather substitute the dynamic force. In relation to many diseases, especially tuberculosis which dominated the practice of physician's in the late 19th century, this meant the prioritising of good diet, bed rest and fresh air. Finally, Rothstein presents the triumph of science as a *fait accompli* and underestimates the resistance, especially from physicians within allopathy to bacteriology in general and to Koch's theory and methods in particular[42].

Homoeopathy's "alternative" status is projected back onto history to reinforce the notion of its incommensurability with science. Naomi Rogers claims, contra Juette, that whilst homoeopathy changed over the course of the 19th and 20th centuries, it still maintained its "alternative" status [43]. It was what that "alternative" looked like that changed[44]. The Hahnemann Homoeopathic Medical College of Philadelphia, for example, the focus of Roger's Formist narrative, was one of the few homoeopathic colleges to survive in the US after 1920. With scientific medicine now perceived as laboratory based bacteriology, and medical education curricula reflecting these changes, the college became uncomfortable with its homoeopathic past. Beginning in 1890 the college began to create, not a scientific identity for itself, according to Rogers, but another "alternative" identity;

"[...] one neither profoundly homoeopathic nor integrated into professional orthodoxy. [Rather] the medical school continued to teach homoeopathic therapeutics and to train practicing physicians and began to accept students whose religious and ethnic backgrounds placed them outside the narrow bounds of American medical education"[45].

Rogers unfortunately gives little weight to the important fact that the Hahnemann incorporated the anti-sepsism of Lister and the bacteriology of Koch and Pasteur in

[42] See chapter 5 of this thesis.
[43] See page 6 of this chapter where Juette suggests homoeopathy was not alternative to but 'different' from science.
[44] Rogers (1998)
[45] Rogers (1998) p 279

the 1870s and 1880s, thought she does note that these developments in medical science were incorporated into homoeopathic education and *practice.*[46]

Defining science as pathology, anatomy and physiology on the one hand, and bacteriology on the other, Rogers explains homoepathy's demise in terms of both economic non- support *and* lack of identity[47]. Rogers' conclusion, that homoeopathy dovetailed far more effectively with the Parisian medicine of the 1840s and 50s than with the laboratory medicine of the 1870s and 80s and that such precipitated its demise, is far more problematic. In an over generalisation she claims "[...] homoeopaths were valued as healers not laboratory workers, and the new sciences of pathology, physiology and bacteriology were irrelevant" and "[i]f pathological changes lay beneath symptoms that could be seen and felt, what then was the nature of the patients' condition?" [48]. Homoeopaths recognised that symptoms were often the *result* of pathological tissue changes, and clinical experience came to teach them that certain drugs and drug groups corresponded therapeutically to certain diseases so that to know the disease was often of the utmost importance[49]. Indeed, even the "high dilutionist" James Tyler Kent recognised the value of knowing, through pathological anatomy, which tissue changes had taken place in the body during disease before death.[50] Whilst it is true that Kent was a Swedenborgian, prioritising mental and emotional over physical symptoms, it is *not* the case that "Kent categorically rejected diagnoses based on pathological anatomy as the means of selecting homoeopathic remedies"[51]. Indeed, Kent and others considered pathological anatomy offered the

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[46] Rogers (1998) pp 83-84

[47] Rogers (1998)

[48] Rogers (1998) p 36 Chapters two and five of this thesis will show that this was not the case and that the whole point of the provings was the determination of the action of a drug on the body, be it animal or human. There were both pro and anti vivisectionists among homoeopaths at this time and many experiments were performed on animals, the advantage being this could be done to the point of pathological damage. ibid p 45

[49] See, for example, the address of Dr Harvey Dale to the A.I.H. in 1879 in chapter two of this thesis relating the symptoms and pathology of *bryonia* , as well as drawing on Ehrlich's hypothesis of the elective affinity of drugs to do so. See also chapter five of this thesis where homoeopaths at the turn of the 20th century expressed their conviction that to *know* that a patient was tubercular was of the utmost assistance in guiding the physician to the similimum.

[50] Kent (1903?)

[51] Kirschmann (2004) p 125. It appears Swedenborgianism influenced homoeopathy in relation to the scale of potencies. Though there was never only one scale in use and what potencies were effective in which diseases on which patients was constantly a matter of debate. Swedenborgianism was a spiritual movement, manifested particularly in the New Jerusalem Church in 1784, begun by Immanuel Swedenborg (1688-1772) a Swedish scientist, philosopher and mystic. Swedenborgianism combined the doctrines of Christianity with Pantheism and Theosophy advocating a correspondence between the

homoeopath deeper knowledge of the action of a drug, providing the Hahnemannian ideal of the "totality of symptoms"[52]. Pathology revealed to the homoeopath the nature of chronic tissue change before death, something homoeopathic provings could never ethically establish. To know a drug's action more fully had a direct bearing on how it would be used in clinical practice.

Rogers is not the only historian to miss this point. Hahnemann is generally portrayed as a religiously informed, high potency prescriber with Swedenborgian affiliations, a "dogmatic" possessing "missionary zeal" in his high potency prescribing and translation of Hahnemann's miasms into "moral sins", the product of a 19th century intellectual mindset orientated "[...] toward an ordered and predictable universe, toward a synthesis of matter and spirit"[53]. Or homoeopathy is portrayed as a medical "alternative" (not a science alternative) akin to Phrenology, Mesmerism, Perkins Tractor, Bishop Berkeley's tar- water and other "quack" remedies or "kindred delusions"[54].

As well as losing out through such associations, homoeopathy's "alternative" historical status seems contingent in part upon national context and the relative status of biomedicine and homoeopathy within that context. David Arnold and Sumit Sarkar claim that, when homoeopathy reached Indian shores, it was not considered alternative but the "new orthodoxy" being seen as Western *but not colonial,*- and thus a good thing [55].

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spiritual and material worlds. Notable homoeopathic physicians who were associated with this movement in 19th century America included, among others, Constantine Hering (1800-1880) and James Tyler Kent (1849-1916). It was the latter who made an explicit connection between Hahnemann and Swedenborg, showing that both conceived of disease as a matter of spirit, an idea Kent also subscribed to. Kent elaborated on this in his advocacy of high potency remedies as acting first, on the will and the intellect and only secondly upon the tissues and sensations. Both Swedenborg and Kent believed conflict between will and thought was the precursor to disease. For Kent the homoeopathic remedy's ability to produce right thinking and willing was ultimately what led to cure. Some have alluded to the fact that such Sedenborgian links precipitated homoeopathy's early 20th century decline. However, there is evidence that certain allopaths also subscribed to Swedenborgianism. In 1836 Luther Clark, a prominent Boston allopathic physician, voiced his hope in the New Jerusalem Magazine that Swedenborgiansim would "soon reach and reanimate the science of medicine." (Winston 1999 p 166). Further research may reveal additional allopathic affiliations.

[52] See chapters two and three of this thesis for more on the totality of symptoms.

[53] Kett (1968) p 153

[54] Both Kett (1968) and Kaufman (1971) use the anti-homoeopathy tract written by Oliver Wendell Holmes (1860) extensively in their narratives.

[55] David Arnold and Sumit Sarkar (2002)

Part of the reason for the portrayal of homoeopathy and "science" as incommensurable is the over dichotomisation by some historians of homoeopathic and allopathic practice along vitalistic/materialistic lines[56]. Both medical systems possessed elements of both until at least the third decade of the 20th century. Overly vitalistic interpretations lead to the underestimation of the use of medical technologies by homoeopaths. The stethoscope, ophthalmoscope, laryngoscope, microscope, bacteriological tests, x rays, spirometer and electrocardiograph were all useful to them, though historians generally portray homoeopaths as having a problem "competing" with these developments[57]. Often, such innovations came from medical general practice, where the majority of physicians of both schools were concentrated[58].

This spirit is further at work when homoeopathy's spread is likened to religious conversion[59]. Hofstra, in her study of 19th century homoeopathy in the Netherlands describes Hering, Quin, Boenninghausen, Des Guidi and Jahr. as Hahnemann's best known "disciples"[60]. Hahnemann's claim that homoeopathic action was " gentle, prompt, certain and lasting" was a "slogan", one adhered to by the "most faithful of Hahnemann's followers"[61]. Des Guidi she describes as "initiated" into homoeopathy in Italy over a two-year period and describes how homoeopathic doctors paid for their "apostasy"[62]. Towns and cities apparently came "under the spell of homoeopathy" in some inexplicable, accidental way[63].

Similarly, over emphasis upon the philosophy rather than the *practice* of homoeopaths leads historians to conclude that homoeopathy has always been "Janus faced" looking

[56] Coulter (1973) Nicholls (1988) Starr (1982) and Ritzmann (2002).
[57] Kirschmann ((2004) Squires (1985)
[58] As opposed to occupying institutional positions as specialists or being in 'academic' medicine or research.
[59] Hofstra (1993)
[60] These were and are all 'big names' in homoeopathy. Constantine Hering was a german Migrant considered the father of homoeopathy in America. Quin obtained the same status in Britain and Des Guidi in France. Jahr practiced with Hahnemann in Paris and Boenninghausen was next to Hahnemann, the most significant 19th century homoeopathic practitioner..
[61] Hofstra (1993) p 162
[62] Hofstra (1993) pp 166-7
[63] Hofstra (1993) claims this of Rotterdam.

simultaneously to Empiricism and Idealism[64]. Emphasising the religious and Idealist roots of Hahnemann's thinking Goethe and Schelling become Hahnemann's "philosophical" predecessors. Homoeopathy's success becomes evidence only of a Romantic counter movement.[65] Yet such over dichotomisation belies the fusing of Empiricism and Idealism in medicine throughout the 19th century as well as the changing meanings associated with Rationalist and Empiricist medicine[66]. For example, Rationalism in the first half of the 19th century was associated with the "principle of specificity". This principle advocated an individualised match between medical therapy and the specific characteristics of a particular patient in their social and physical contexts and remained uncontested in medicine until the late 1860s[67]. The highlighting of homoeopathy's philosophical nature as the "losers of history" enables other historians to claim the homoeopathic therapeutic encounter between doctor and patient was either changeless throughout the 19th century, technologically unimpressive or overly time consuming[68].

Presentism again manifests itself when some historians emphasise the Paracelsian doctrine of signatures within homoeopathy, which they suggest came through Kent [69]. But both Hahnemann and the majority of 19th century homoeopaths in Britain and American maintained the importance of physical symptoms and did not assign a role to signatures in diagnosis. Again Kent is portrayed as the 20th century progenitor of homoeopathy's metaphysical turn, yet the archives show Kent was *simultaneously* a member of the breakaway, high dilution International Hahnemannian Association

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[64] Nicholls (1988) p 259

[65] Nicholls (1988) Ritzmann in (Dinges 2002) Hofstra (1998)

[66] Warner (1977)

[67] Similarly, the nature/culture associated with Ortner (cited in Nicholls 1988) explanation of Rationalism's dominance locks us into a tautology since it is probably impossible to discern whether nature is devalued due to women's association with it or vice versa.

[68] See Fuller (2002) for how historians pre figure history's "failed" scientists as "philosophers" rather than 'real scientists'. I suggest historians are adopting the same strategy here with homoeopathy. For the putatively unchanged nature of the 19th century homoeopathic therapeutic encounter see Stolberg in Dinges (2002) and Nicholls (1988). For a counterclaim to this see Tyler (1942) p 785 par. 4.

[69] Garrison (1929) Nicholls (1988). Whilst the latter does specify that Hahnemann rejected the doctrine of signatures, he does, confusingly, discuss its 20th century reappearance within homoeopathy in the context of 19th century practice.(pp 260-262) in order to elaborate the implied connection between homoeopathy and the 'occult' [69]. The doctrine of signatures is one that has repeatedly waxed and waned throughout medical history. In this context of 20th century homoeopathy it relates to the idea that drugs have a signature (not to be confused with Kent's 'key notes' and Boericke a "red line" epitomising the characteristic of a drug) and that the use of a drug is inscribed in some way upon it. So, the signature of *pulsatilla,* a remedy taken from the meadow anemone, is if fragility and changeability. The meadow anemone sways readily in the wind and has shallow roots. *Phosphorus* has explosive, sparkling and effervescent characteristics, features often found in one requiring the drug.

(I.H.A.) and a member of the "mainstream", apparently low dilution, American Institute of Homoeopathy (A.I.H), even being elected Chairman of the latter's Board of Materia Medica in 1908. The emphasis upon metaphysics and signatures in late 20th century homoeopathy should thus be interpreted, less as a result of Kentian philosophy, and more a contemporary, defensive, identity creating "reaction formation" post Kent, from a marginalized and threatened group.

Past and present are again confused in the conclusion of some historians that homoeopathy did not produce dramatic results. This is part of the "slow and gentle" rhetoric associated with medical systems that are perceived, especially in the current climate, as "natural" and "holistic". But homoeopathy is a *drug* system. It prepares its drugs from the animal, vegetable and mineral kingdoms, using many poisonous substances. Moreover, homoeopathy's success in the cholera and yellow fever epidemics show its results were anything but slow[70]. Furthermore, physicians of all affiliations at the turn of the century were still primarily treating acute (i.e. short-lived, predominantly infectious) non-chronic diseases and as such prescribed in a specific rather than constitutional way [71]. That is, the same drug was used for many people with the same disease (e.g. belladonna is a homoeopathic "specific" for scarlet fever). The predominance of acute prescribing *at that time* is confused with the chronic and constitutional prescribing in the *contemporary* context [72].

Homoeopathy in the hands of many historians becomes the Foucauldian "other", being weakly or strongly supported in direct proportion to the strength of its opposition, having no internal dynamic or identity of its own, being collectively considered the victim of fading distinctiveness"[73]. Contrarily on this point, Kirschmann takes the view that, whilst not sitting well with bacteriology (a.k.a. "science" in this instance), homoeopaths were not rejecting their homoeopathic identity just because they were attempting to make some of their practices more

[70] See for example Squires (1985) ps 387-390 .
[71] British Homoeopathic Journal (2000).Volume 89 No 2 p 90
[72] Nicholls (1988) This is probably a direct result of the influence of Coulter on Nicholls' narrative. The former's wife, Catherine Coulter, is a 'classical' Kentian homoeopath and has written extensively on homoeopathic drug pictures. Her case studies reveal a strong predominence of patients with chronic conditions being treated. See Catherine R. Coulter (1986), (1998), (2002)
[73] Warner (1998) p 21 Foucault (1981) Hofstra (1993) Warner (1998) Nicholls (2002)

scientific[74]. They were not bastardising homoeopathy[75]. Nor were they "rogue" homoeopaths whose future was doomed from the time they "moved beyond" Hahnemann's original principles. Such a dismissive view prevents an investigation into the commensurability of homoeopathy and "science" (of any kind), since the former category becomes, automatically, a misnomer when it comes to resemble the latter.

A further reason why homoeopathy's potential as "science" is underestimated is that a disproportionate amount of attention has been given by historians to its early development, i.e. the first half of the 19th century, and thus its support by lay groups[76]. Other historians have represented adherence to homoeopathy in terms of market expediency,[77] social class,[78] or the self- help practices of frontier or scattered populations.[79]

At best homoeopathy is credited with burying heroic medicine, contributing to the allopathic materia medica and, through the provings, restoring an empiricist methodology to an overly rational medical system[80]. They echo the words of Mark Twain who claimed all should be " [...] grateful that Homoeopathy survived the attempts of the allopaths to destroy it, even though you may never employ any physician but an allopath while you live" [81]

Archival Negligence

In addition to its early history, the social and economic context of homoeopathic medicine has received much attention. This has led, in turn, to a concentration upon changes in medical legislation and education and the needs of a 20th century corporate capitalist economy[82]. Whilst these are important areas for investigation it has contributed to homoeopathy's clinical history being neglected. Nevertheless, some

[74] Kirschmann (2004)
[75] Coulter (1973) Nicholls (1988)
[76] Brade (2002) Leary (2002) Kirschmann (2004)
[77] Faure (2002)
[78] Hofstra (2002) Nicholls (2002)
[79] Kaufman (1972) Kotok (2002) Petursdottir (2002) Arnold and Sarkat (2002)
[80] Kaufman (1972) Coulter (1973) Nicholls (1988) Chand (1990)
[81] Chand (1990) p 25.
[82] Kett (1966) Kaufman (1972) Coulter (1973)

historians have proceeded to draw conclusions regarding homoeopathy's clinical nature, such as the incorporation of certain aspects of science or allopathy which led to a fatal decline in homoeopathic distinctiveness and identity[83].

Not only does homoeopathic clinical material tend to be ignored, historians utilise it disproportionately. Warner, for example, out of a total of 108 references in one article uses only 17 homoeopathic primary sources[84]. Of these, two are homoeopathic journal articles and two are references to William Holcomb's diary and autobiography, and relate to the *mid* not late 19th century, the latter constituting the main focus of Warner's narrative. Eleven are letters from a single collection, being a presidential address to a state homoeopathic medical society and one an M.D. thesis on the orthodox practice of homoeopathy. In short, Warner does not look at a *single homoeopathic journal or society transaction reference that relates to the period when medical science was being forged, i.e. the late 19th century* This seems inappropriate since the whole telos of his article tends toward this period.

Whilst Starr similarly neglects homoeopathic archival sources (he does not refer to a single one) he nevertheless feels justified in claiming that "Homoeopathy had one foot in modern science and the other in pre-scientific mysticism; this became an increasingly untenable position",[85] and that "While regular medicine was producing important and demonstrable scientific advances homoeopathy generated no new discoveries. The contrast was not lost on many in the group"[86]. Such neglect of primary homoeopathic archival material is often accompanied simultaneously by an over reliance upon secondary sources [87].

An accompanying Whig tendency is the assumption that establishing homoeopathy's efficacy is hampered by its incommensurability with the modern day Randomised Controlled Trial (R.C.T.). Whilst there is some truth in this because of homoeopathy's tendency to individualise treatment, it should be recalled that the R.C.T. did not

[83] Coulter (1973) Kaufman (1972) Nicholls (1988) Starr (1982) Warner (1998). Only Weatherall (1996) explicitly suggests the possibility of an alternative medico-scientific trajectory.
[84] Warner (1998)
[85] Starr (1982) p 107
[86] Starr (1982) p 108
[87] King (1905) Kett (1966) Kaufman (1971) Rothstein (1972). See Rogers (1998) and Dinges (2002) as inappropriate users of secondary sources.

become the 'gold standard' of efficacy in medicine until the 1950s and that individualised drug treatment was a feature of allopathic as well as homoeopathic medicine at the turn of the 20th century. Dinges, for example, cites R.C.T. evidence to suggest homoeopathy's "unproven" status from drug trials in 1948, 1990 and 1994[88]. Indeed, closer attention to the homoeopathic archive shows that American homoeopaths introduced the control group, the placebo and the double blind trial in the U.S. in the 1870s. At this time no such experimental framework existed in allopathy[89].

Archival negligence underlies many false dichotomies in this field. Some historians claim that nosodes, (live diseased human tissue products) and sarcodes, (live healthy human tissue products), were not used by low dose prescribers and their use is not generally found in institutional settings. However, patient case notes from the London Homoeopathic Hospital (L.H.H.) at the turn of the 20th century show the use *of tuberculinum, bacillinum* (nosodes) and *thyroidum* (sarcode) *in both in and out patient treatment.* As I will show later, I believe the divisions that existed in homoeopathy at this time centred round medical epistemology and the nature of the drug or the size of the dose.

Archival negligence is, however, a two way street in that historians sometimes neglect key allopathic material. For example, allopathic contesting of bacteriology is given scant if any mention as is true of opposition to (and evidence against) anti-sepsis Alternately, homoeopathic opposition and objections to these practices is often noted [90]. The evaluations of historians thus reflect the enduring ability of 19th century medico- scientific rhetoric to influence the way homoeopathy's history is constructed.

The Beginnings of Tory Historiography

Mark Weatherall detects the potential homoeopathy had to become medical science in his study of the Cambridge based homoeopath William Bayes. Weatherall correctly

[88] In other words, Dinges uses evidence from a later date to support a claim relating to an earlier date (Dinges 2002).
[89] See Le Fanu (1999) p 29. Le Fanu recognises of course Louis of Paris and Lind of Scotland in the use of statistics in establishing clinical efficacy.
[90] See chapter five of this thesis for allopathic reaction to Koch. For opposition to Listerism see Granshaw (1992).Hahnemann (1810) p 12

points out that mid 19th century "[...] there was little consensus about the meaning of scientific medicine [in fact] there were many types of scientific medicine in the 1860s[91]". One such was homoeopathy he suggests. In 1861 Bayes sought election to honourary membership of the staff at Addenbrooks hospital, Cambridge, England. This contest, repeated across the country at this time, was crucial Weatherall claims, since Bayes's vision of homoeopathic scientific medicine included its involvement in the education of medical students, part of the future elite in medicine, as well as "[...] its inclusion in the pantheon of accredited investigations by which medical knowledge was to be advanced"[92].

In the event Bayes's application to Addenbrooks was rejected and scientific medicine became defined around laboratory based activity. Bayes's election to Addenbrooks was seen as a threat to the stability of the hospital since it was expected that most of the staff would resign and many financial contributors would withdraw if his membership was successful. Bayes's failure prefigured homoeopathy's exclusion from the scientific arena, especially from the laboratory circles of. science. As Weatherall astutely notes, the advent of the laboratory did not give privilege *a priori* to one type of investigator or knowledge over another. Nevertheless, laboratory based investigations were an elitist, expensive enterprise, one that could only be maintained in a few British medical schools and universities, an arena traditionally closed to homoeopaths. With these developments doctors of all persuasions came to play a subsidiary role in scientific investigations and, what Cooke has referred to as "the scientist physician", became increasingly rare[93].

Furthermore, Weatherall is keen to emphasise the fact that homoeopathy did not fail to become scientific medicine due to any demonstration of its therapeutic inefficacy but because homoeopaths such as Bayes were excluded from debates about medicine by their exclusion from hospitals, medical schools, medical journals and medical societies: the arenas of the science debate. This, in turn, led to the drawing of boundaries around legitimate practices for the advancement of medicine. Coupled

[91] Weatherall (1996) p 176.
[92] Weatherall (1996) p 176
[93] Cooke (1964) Weatherall mentions the private laboratory of Benjamin Ward Richardson but homoeopaths had private laboratories at this time also such as Galley Blackley, who I refer to again later in this thesis.

with the education of the public regarding the scientific rules by which competing world views should be assessed, scientific medicine came into being. But it was "[...] a *certain form* of scientific medicine", a form that came to include microscopy and chemical analysis but *excluded* the proving of remedies. It was a form of medicine that legitimated the chemist and experimental physiologist as "scientists" but excluded the homoeopath. It was a form of medicine practiced in the laboratories of universities and medical schools, but not homoeopathic clinics and dispensaries. In time, Weatherall concludes "[...] this form of scientific medicine became so firmly established that it is difficult, even for the historian, to envisage a time when it was just one among many competing visions of what medicine should be"[94].

In the next chapter I will begin by showing how homoeopaths and allopaths in America followed similar institutional trajectories throughout the 19th century, and how the former invoked both the content and rhetoric of science just as vigorously, if not more so, than the latter. Focusing upon homoeopathic clinical primary sources from both Britain and America I will show that homoeopaths, especially in the United States, did not have to "face" scientific medicine but were attempting to construct it.

[94] Weatherall (1996) p 194

Chapter Two

Homoeopathy as Science

Introduction

In this chapter I will outline briefly the institutional development of homoeopathy in the U.S. and the U.K. in the 19th century. I will show that, in a context of institutional diversity and significant scale, particularly in the U.S., homoeopaths constructed their own vision of "science". What was considered "scientific medicine" underwent several metamorphoses throughout the 19th century, whilst different groups allied to medicine defined "science" variously in any one time- period. Thus, "science", used rhetorically both as a legitimating tactic and as an explanatory tool, referred to Rationalism (systemic medicine with theory), Parisian medicine, Expectant therapy, physiological and pathological investigations (including cellular pathology), experimentation, the preventative medicine of the hospital, the bacteriological investigations of the laboratory, something divorced from practice and the empirical method[1].

Homoeopaths for their part considered themselves "scientists" since they were custodians of the therapeutic law "similia similibus curentur" and since their epistemology centred round empirical investigations. They considered this law the basis of what scientific medicine should look like. They employed the results of both their own research and that of others to explain the modus operandi of the similimum, (the homoeopathically selected drug) and, to a lesser extent, to direct practice. In short, homoeopaths neither rejected science, nor passively embraced it, but contested what scientific medicine should be. Their numerical growth and institutional proliferation in the latter half of the 19th century was built upon their early therapeutic successes of the cholera years. The lack of medical licensing and regulation in the U.S. meant that homoeopaths produced a serious contender for the "science" accolade.

[1] Bynum (1994) Warner (1997).

Cholera and Consultation: Their Impact on Homoeopathic Institutionalisation.

Between the 1830s and 1850s several cholera epidemics swept from India, through Russia into Europe and the United States reaching the latter's shores in 1848. By this time Hahnemann's homoeopathy had also spread so that homoeopathic doctors could be found in all the major centres of the epidemic. Hahnemann never personally witnessed cholera but from the reports of others was able to determine three principle remedies for the disease *–camphor, veratrum viride and copper*[2]. Whilst homoeopathy's subsequent successes were "explained away" by allopaths there occurred an increase in public confidence in the new medical system.[3] Allopathic medicine was already in a weakened state since it enjoyed neither legal protection nor professional monopoly.. Furthermore, allopathy was still in its unpopular "heroic" era, where bleeding with leeches and purging with *mercury* were commonplace[4]. Consequently, allopaths in the U.K. and U.S. added a Consultation Clause into their Medical Codes of Ethics preventing their members from, initially professional, then personal, association with any "quack". This included herbalists, mesmerists, hydrotherapists and other medical sectarians, yet it can be asserted that homoeopathy suffered the greatest impact from this clause since, initially, most of its adherents were converts from allopathic ranks. Such exclusionary tactics *constructed* a divide between homoeopaths and allopaths which, initially at least, had nothing to do with theoretical differences[5]. Thus, homoeopaths created their own medical societies, schools and journals out of necessity, so that by the latter half of the 19th century homoeopathy had become established institutionally in both the U.K. and even more so in the U.S. Whilst the effectiveness of the consultation ban is disputed by some historians, it is acknowledged the ban did lead to expulsions and compelled some

[2] Historians have generally ascribed homoeopathy's success in cholera as having a notable impact on the spread of homoeopathy among public and politicians alike. Allopaths explained these away by attributing such successes to the *vis medicatrix naturae* (vital force) and the over use of heroic therapeutics by the old school. See chapter 4 of this thesis for a more in depth explanation of this, where I also give more detailed information regarding homoeopathy's success in treating cholera. Kaufman (1971) Coulter (1973) Squires (1985)

[3] See chapter 4 of this thesis for how allopaths achieved this.

[4] Coulter (1973) chapter 1, Rothstein (1972) chapters one though three, Kaufman (1972) chapter one and Warner (1977) chapter three. Deemed "heroic" since the patients were the heroes of such aggressive treatment.

[5] Nicholls (2001)

physicians to openly retract their homoeopathic leanings in the face of stigma and ostracism[6]. The ban was in force until the first decade of the 20th century[7].

Whilst U.K. homoeopaths were never as numerous as their American counterparts (a U.K. high of 300 homoeopathic practitioners compared to a U.S. high of c.12, 000 at the end of the 19th century) British homoeopaths were able in 1858 to prevent allopaths from making homoeopathic practice illegal under the new Medical Act. This Act required physicians to be registered and led to the inauguration of the General Medical Council (G.M.C.). In the U.S.A. at the turn of the 20th century, allopaths were unable to enact the licensing laws they desired single- handedly. William Osler stated, "[...] if we wish legislation for the protection of the public, we have got to ask for it together not singly"[8]. Consequently non-regular physicians participated in some way in the licensing process in at least thirty -four of the forty-five American states in 1900[9].

Indeed, the American Institute of Homoeopathy (A.I.H.) became America's first national medical society in 1844, pre-dating the American Medical Association (A.M.A.) by three years. In Britain the Provincial Medical and Surgical Society (P.M.S.A.- later to become the B.M.A. in 1856) was formed in 1832 and the British Homoeopathic Society (B.H.S.) in 1844. The U.S. National Medical Convention of 1847 estimated that there were 40,000 allopathic physicians in the country, or one for every 500 population. The number of homoeopathic medical schools and local societies continued to increase so that by 1898 homoeopaths in America could boast 9 national medical societies, 33 state societies, 85 local societies, 39 other local organisations, 57 homoeopathic dispensaries, 20 homoeopathic medical colleges and 31 homoeopathic medical journals. The last quarter of the 19th century saw the hospital become an important locus of allopathic medical treatment and research and the same was true of homoeopathy. Homoeopaths in America by this time had 66

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[6] Coulter (1973) pp 199-219

[7] The Lancet responded to a query regarding consultation with homoeopaths as late as 1901:
"It is not right for a medical man to meet practitioners who follow homoeopathic lines in consultation. The tenets of homoeopaths are founded on a *completely false conception of disease;* there is therefore no common ground upon which medical men can meet for any discussion which would be of advantage to the patient."(italics original) [7]

[8] Rothstein (1972) p 307

[9] Rothstein (1972) p 308

general homoeopathic hospitals and 74 speciality homoeopathic hospitals. The A.M.A. calculated in 1871 that there existed 39, 175 allopaths, 2,962 homoeopaths, 2,855 eclectics, 137 hydropaths and 4,809 unclassifiable physicians. Rothstein calculates that by 1898 the number of homoeopaths in the U.S. had risen to 10,000 claiming this plethora of medical institutions was down to the "[...] wealth and influence of [homoeopaths'] clientele[10]. By 1901 the A.M.A. Committee on Organisation calculated that there were 110,000 allopaths in the U.S. and by 1912 there was one allopath for every 640 population compared to a ratio of one homoeopath for every 5,333 of population. This represented slightly less than 9 times the number of allopaths compared to homoeopaths. In that year the A.M.A. also calculated that there were 126 allopathic medical schools compared to 22 homoeopathic, 9 eclectic and 3 other medical schools[11].

Further, just as allopathic medical schools and universities merged at the end of the 19th century, providing hospital based clinical instruction for medical graduates, so in 1907 the Homoeopathic Medical College of New York as well as the New York Homoeopathic College for Women had their own hospitals, giving students access to 1500 beds- more than the rest of the colleges in the city combined. University affiliated homoeopathic medical schools included Boston University with other such arrangements existing in California, Iowa, Minnesota, Nebraska, and Ohio.

British homoeopathy grew too during the mid 19th century. In 1867 the U.K. had 251 homoeopathic doctors, 12 vets, 5 hospitals, 64 dispensaries, 2 quarterly and 3 monthly medical journals, 4 major medical societies, had produced 198 books and 192 tracts and pamphlets, whilst the London Homoeopathic Hospital (L.H.H.) treated 59,128 patients in 1886 alone [12]. The main difference between British and American homoeopaths is that the latter were far more successful at making institutional in - roads than the former. This in turn reflected the more powerful exclusionary tactics which allopaths in Britain were able to mobilise[13].

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[10] Rothstein (1972) p 236
[11] Rothsteins (1972) p 294
[12] Combined number for in and out patients.
[13] Weatherall (1996) for some of the explicit exclusionary tactics used by allopaths against homoeopaths when it came to occupying posts on hospital boards, for example.
Germany offers an interesting comparison. In 1860 Germany had 259 registered homoeopaths, 2 national medical societies, 6 state societies, 3 local societies, 13 homoeopathic hospitals, 14

By comparison, homoeopaths and allopaths also developed along parallel lines in the U.S. regarding medical specialisation. According to Rothstein medical specialities multiplied during the last decades of the 19th century. Both the A.M.A. and the A.I.H. had speciality bureaus in materia medica though Rothstein notes ophthalmology was the first speciality. The A.I.H. eventually came to have bureaus in both of these specialities but the development of ophthalmology outside the A.I.H. earlier in the 1870s could have proved significant for homoeopaths[14]. Surgery was a further specialism and in 1891 a visiting British physician related how a Chicago homoeopathic surgeon possessed the largest practice in that city, whilst in 1876 the head of surgery at the Homoeopathic Medical College in New York Dr. William Tod Helmuth performed one of the first antiseptic operations in the United States – an ovariotomy. Thus the A.I.H.'s Bureau of Surgery in 1883 could produce a favourable report on the benefits of antiseptic surgery[15]. Indeed, the A.I.H. by 1882 came to have speciality bureaux in obstetrics, gynaecology, paediatrics, surgery, psychological medicine, otology, and laryngology, public health and all the basic medical sciences such as pathology and physiology [16].

In the U.K. homoeopathic medical education was first conducted at the Hanover Square and Hahnemann Hospitals in London. In 1878 the London School of Homoeopathy was formed. It was the only such school in Britain at that time and suffered an insecure existence. By 1882 it was granting diplomas and licentiates in homoeopathic medicine. The President and chair were both from the family of Lord Grosvenor, a personal friend of Dr.Quin, who had brought homoeopathy to Britain from Europe. Grosvenor had defended homoeopathy in parliament regarding the institution of the 1858 Medical Act. Entrance to the school was limited to qualified practitioners (i.e. allopaths) and interested students from recognised medical schools.

Whilst the U.K. only possessed one homoeopathic medical school, American homoeopathic schools were among the wealthiest in the country. In 1900 three of the

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homoeopathic apothecaries, 4 professional medical journals and 4 homoeopathic popular journals. Taken from Juette (1998)

[14] See chapter three of this thesis.

[15] Rothstein (1972) p 259

[16] Homoeopaths also ran a well known ophthalmic hospital in New York City

four largest medical libraries were in homoeopathic medical schools and two of the five medical schools assessed as having the greatest material assets, in terms of buildings and grounds, were homoeopathic. Homoeopathic medical education differed little from that in regular medical schools, with an emphasis on anatomy, physiology, chemistry, histology, embryology, surgery, obstetrics, gynaecology, and medical jurisprudence. The major difference was in therapeutics, which as far as the allopath Osler was concerned (1891) meant, "[...] the divergence of opinion on this one branch separates absolutely the different classes of practitioners from each other" [17]. Coulter claims homoeopathic schools placed much greater emphasis upon pharmacology whilst allopathic schools relegated this subject beneath pathology and physiology, thereby disadvantaging the former in the A.M.A.'s assessment exercises of 1907 and 1910[18]. David Cowen confirms that throughout the 19th century orthodox materia medica was often joined with therapeutics, pharmacy or botany since most allopathic institutions could not finance a chair in therapeutics alone[19]. Despite the differences in emphasis on pharmacology homoeopaths continued to excel in the basic science examinations when licensing examinations were instituted in the 1880s and 1890s, Coulter himself demonstrates that scientific medical education and exam success was higher in some homoeopathic than allopathic schools [20]

Further, homoeopaths were active in public health. In 1873 homoeopathic Dr Tullio Verdi as Health Officer of the D.C. Board of Health was requested by the District Governor to investigate the sanitary Laws of key European cities. At home Verdi had already established dispensaries and enforced the smallpox vaccination Law. In 1875 he was elected as President of the Board. In 1878 Verdi and the Board faced the spread of Yellow Fever from New Orleans into the Mississippi valley. Verdi failed to have a homoeopathic physician placed on the Yellow Fever Commission inaugurated by the Surgeon General Woodward, whose self appointed task was to investigate the causes and prevention of the disease. Verdi therefore acquired funds enabling the A.I.H. to inaugurate a second commission comprising eleven homoeopathic physicians, which met in December 1878 to analyse the collated figures of

[17] Rothstein (1972) p 238
[18] Coulter (1973) pp 445-447
[19] Cowen (1980) p 105
[20] Coulter (1973) p 444 ftn 182

homoeopathic physicians working in the epidemic. In time the commission was able to report to Congress a mortality rate under homoeopathic treatment of 5.6 % in New Orleans and 7.7 % in the rest of the South compared with an overall death rate of 16%. Congress' satisfaction with such figures led to Verdi being appointed to the (short lived) National Board of Health in April 1879. Homoeopaths consequently became members and presidents of state and local health boards in New Jersey, California, Pennsylvania, Indiana, Illinois, Nebraska, Delaware, Florida, Kentucky and other states, with homoeopathic Surgeon-Generals being appointed in Rhode Island and New York.

Homoeopaths experienced legislative endorsement and medical educational growth in the latter half of the 19th century so that through their medical schools, university affiliations and professional societies they acquired several of Geisen's pre-requisites for a research programme; significant numbers of medical students, institutionalisation in a university setting, a leader with a research reputation and university affiliation, a focused research programme, access to or control of publication outlets, and simple and exploitable experimental techniques[21].

However, the science programme of homoeopathy has remained unexplored. Where historians have found cross fertilisation between homoeopathy, and pathology, for example, they often interpret this as evidence that homoeopathy was already declining, that it had lost its medical identity, or that it wasn't "real" homoeopathy after all. Pro -homoeopathic historians (such as Coulter) and contemporary homoeopaths tend to be embarrassed by the science project of 19th century homoeopaths. I argue that in the latter half of the 19th century homoeopaths were attempting to put the homoeopathic law of *similia similibus curentur* onto an even more scientific footing. For them this law was to medicine what Newton's Laws of Motion and Gravity were to physics. Whilst I deal with the scientific programme of homoeopaths regarding bacteriology and tuberculosis in chapter five of this thesis and address attempts by homoeopaths to explain the operation of the similimum by means of microscopic analysis and physical chemistry in chapter three, in the rest of this chapter I will concentrate on the incorporation of other developments in medical

[21] Geison (1981) p 24

science outside of therapeutics, as well as those made by homoeopaths within the therapeutic field during the latter quarter of the 19th century. These developments were used to both explain the therapeutic successes of homoeopathy and direct future research. At the turn of the 20th century homoeopaths attempted to construct a medical science programme that had three components: proving the action, effectiveness and modus operandi of similia and the minimum dose; re-proving and restructuring the materia medica to incorporate new diagnostic techniques, chemical analyses, pathology and physiology; and comparative statistical analyses of institutional performances. By outlining these syntheses of homoeopathy with various incarnations of "medical science", I will show commensurability between these and homoeopathy and argue the latter offered an alternative route for scientific medicine[22].

The Changing Faces of Science in the Latter Half of the 19th Century.

By the last quarter of the 19th century homoeopaths were looking for "scientific" explanations of how similia and the minimum dose worked. In the 1840s "medical science" generally meant chemistry, microscopy and clinical medicine. Mid century it related to the numerical method of Louis and the centrality of pathological anatomy, especially the lesion, emphasised by the Parisian school. Physiology and later the cellular pathology and microscopy of Pasteur (who discovered leukaemia by these means) supplanted the numerical method as the new scientific medicine followed by the bacteriology of Koch which by the 1890s occupied hallowed ground. It's worth noting that much that was considered medical science at this time was carried out by, what Geoffrey Davenport has called, "scientist – physicians", general practitioners who performed experiments and investigations in their spare time or as part of their general practice[23]. Since these were prominent in the 19th century, historians' divorcing of "science" from "medical practice" proves unhelpful when dealing with 19th century medical science[24]. Finally, Warner notes that physicians throughout the first two thirds

[22] I define "medical science" in this context as those disciplines that informed medicine such as physiology, pathology and anatomy. I define "scientific medicine "as that medical practice which was deemed to have scientific status at any one time. At various times throughout the 19th century these included, heroic medicine, Parisian medicine, expectant medicine and, I suggest, homoeopathy.
[23] The term "general practitioner" came into use in the 1830s and 40s. See G Davenport (2001)
[24] The R.C.P 's vision of science and its appropriate application to medicine is personified in Sir William Withey Gull (1816-90), a prominent member of the college. Gull first taught physiology and natural

of the 19th century considered their medicine already scientific. "It was the notion of what constituted scientific medicine that changed over time"[25]. Heroic therapy was scientific because it was "rational" and more than "mere empiricism", based as it was upon various mechanical and systemic theories. Louis' medical practice was scientific because it was based upon the numerical method of statistically supported comparisons. Later, the work of Pasteur and Koch was considered scientific because their conclusions were based upon the observations of previously occult phenomena and the replication of experimental effects, even though the *therapeutic* implications of these discoveries were far from clear[26].

National variations existed regarding developments in medical research investigations generally and their impact on practice was variable. The British medical historian W.F. Bynum claims science, in terms of a medical research community, developed more slowly in Britain than elsewhere whilst bacteriology as the "new science" of the late 19th century became established later here than elsewhere[27]. For one thing there was a lack of state funding for medical investigations so that many researchers and instructors continued to engage in more lucrative private practice. Furthermore, the 1876 Anti-Vivisection Act meant research on animals could only be carried out with a licence in registered premises. America experienced the influence of the German laboratory earlier than Britain, partly due to the large number of American physicians completing their medical education in Europe. Later, the medical educational reforms enacted by the Rockefeller and Carnegie foundations in America were closely modelled on the German ideal of science.[28].

Physiology appeared a relative mainstay for physicians within the vicissitudes of science's changing character. The allopath E.W. Gray told the A.M.A. in 1874 that

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philosophy and as a scientist-physician brought anorexia nervosa to a wider audience, discovered myxoedema, made a major contribution to study of arterioles in hypertension and nephritis and pioneered an extensive epidemiological study. At the same time he can be described as an 'expectant' being sceptical of the utility of many medicines.

[25] Warner (1997) p ix

[26] Having noted the changing 19th century notions of science, however, Warner still talks of the emerging "ideal of science", as if there was only one, and the new relationship "between science and medical practice but also between science and professional identity and between science and professional integrity" without actually explaining what *he means* by science in this context. Warner (1997) p x

[27] Bynum (1994) pp 112-114

[28] William Osler (1849-1919) combined the English method of bedside teaching in small groups with close cooperation of wards and laboratories that were a feature of the German medical schools.

"Physiology is rising to the dignity of a positive science" whilst Duncan Bulkley in the same year claimed "physiology is the touchstone" and "with his microscope and test tube [the scientist] is going through our nostrums"[29].

British physicians emphasised physiology, clinical signs and symptoms over pathological anatomy and resisted bacteriology for longer. This was illustrated by the cool reception of the General Medical Council's (G.M.C.) synthesis of the London, Edinburgh and Dublin pharmacopoeias into one "British Pharmacopoeia" in 1864. This 1st edition of the nomenclature was based on morbid anatomy, which was considered inappropriate by many physicians since such remained unknown when the patient recovered. The 1867 edition proved far more successful, based as it was upon the clinical manifestation of disease.

The Royal College of Physicians of London found its licensing role limited after the 1858 Medical Act but still influenced medical education and government policy. With the inception of the G.M.C. the college could henceforth only grant a licence, which could be registered (with the G.M.C.), on the satisfaction of certain conditions. The college was thus reduced to being one of many examining bodies, all of which were subject to the same rules[30]. Its responsibilities regarding the regulation of medical educational standards, collection of morbidity statistics and advising the government on public health issues, remained however. The 1871 smallpox epidemic, for example, showed the college strongly in favour of vaccination and revaccination[31].

From its inception in 1859 the college examination remained the same for 70 years, and included papers on medical anatomy and the principles of medicine, the principles of public health and psychological medicine. The college considered physics, chemistry and biology to be the preliminary medical science subjects, completion of which qualified a student for admissions to the medical exam and counted toward the first year of a five -year medical degree[32]. Furthermore, the college, once again at odds with

[29] T.A.M.A. 1874 Vol 25 p 153
[30] The B.M.J.subsequently considered the college a "mere medical club". Cooke (1964) p 810
[31] Since the college did not fund its own research until the 1970s its vision of medical science has to be gleaned from the medical educational standards it continued to impose in the late 19th century and the contributions its Fellows made to medical journals.
[32] Such issues brought the College into almost constant conflict with the G.M.C. See Cooke p 909 (1964)

the G.M.C., adhered to its 16th century belief that the science of physic included knowledge of surgery. This was reflected in its examination requirements; the primary exam for licence centring around anatomy, physiology, chemistry, materia medica and practical pharmacy, whilst the professional examination required knowledge in medicine, surgery, midwifery and diseases of women and children. The college remained sceptical of specialisms, associating these with "special hospitals" which in the past had occasionally been associated with quackery[33].

Interestingly the college took an active role in the production of diphtheria anti-toxin after von Behring's announcements in 1893/4 that he had found an effective treatment for the disease. That year the college took over 10,000 throat swabs from cases of suspected diphtheria. By the turn of the century the college was producing large amounts of its own toxin, owning 15 horses for its production[34]. It was in its validation of serum therapy then, that the college's view of scientific medical practice coalesced most closely with homoeopathic therapy, a state of affairs not lost on von Behring himself[35].

Papers from fellows of the college indicate their practice was directly related to their medical education. Many papers show an attempt to match clinical signs and symptoms to post mortem findings. The efficacy of drugs was always an issue and the college frequently fielded questions on this subject from practitioners. Those drugs that were not dismissed as ridiculous (especially for tropical diseases it seems!) were tested and a report made back, though it is not clear whether these "tests" were chemical or clinical. This practice partly reflected the low status of drug therapy at this time. James Sawyer (F.R.C.P), for example, commented in the Lancet of 1880 that so few physicians exchanged clinical experiences in their journal pages with drugs even though many used them, since they did not want to be considered "commonplace"[36].

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[33] In 1860 a surgeon on the staff of a London teaching hospital was forced to resign after he had accepted an appointment at a special hospital. See Stevens (1966) chapter two. Such 'specialisms' included ophthalmology and obstetrics, the college rejecting calls for special diplomas in each of these areas in 1879.

[34] Though all research in the college laboratories ceased in 1902 and the manufacture and test of the anti-toxin sera ended in 1904 with the laboratory being taken over by the Metropolitan Asylums Board. It appears the financial difficulties experienced by the college at this time were mainly responsible.

[35] See chapter five of this thesis for more on both homoeopathic and allopathic use of serum therapy in tuberculosis and for von Behring's homoeopathic admissions.

[36] Sawyer (1880)

It is this aspect of homoeopathy, its focus upon drugs, which made it so different from allopathy at the end of the 19th century. Homoeopaths considered themselves custodians of the scientific Law of medicine, similia similibus curentur. For them only homoeopathy was truly scientific since it was based upon experimentation, or provings, which linked diseases to drug action. Whilst homoeopaths did use science from outside medical therapeutics to enhance their practice and to explain the modus operandi of the similmum, as will be detailed below, they considered theirs the *only scientific medical practice.* Nevertheless, homoeopathy was influenced by, and I will argue influenced, the scientific researches and practices of the wider medical community during a period in history when "science" was still a fiercely contested concept.

Explaining Similia and the Action of the Minimum Dose.

The 1870s was a decade of empiricism in medicine. Homoeopaths, for whom science was synonymous with similia and the provings, brought the empiricism implicit in homoeopathy to the fore during this decade. This was especially the case in the U.S., where Hahnemann's theory of the miasms had adopted a secondary therapeutic role. Indeed, one group of homoeopaths from within the A.I.H suggested the construction of a systematic experimental homoeopathic research programme[37]. At the same time Rudolph Virchow placed empiricism centre stage when he claimed in 1877 that "scientific methods have been everywhere introduced into practice" and that "therapeutic doctrine has become biological and thereby experimental science", since it was the *experience* of the pathological anatomist and physiologist that had become the basis of diagnosis and prognosis[38].

Ehrlich's "receptor" hypothesis was consistently used to explain the operation of the homoeopathic drug. Homoeopaths claimed that every cell consisted of a central group of complex molecular combinations as well as some subsidiary atomic complexes with unsatisfied affinities. These unsatisfied affinities brought the central group into relationship with nutritious or toxic material. Alfred Drury noted that homoeopaths had found through their provings that drugs acted upon particular cells or groups of

[37] See chapter three of this thesis.
[38] Virchow 'Standpoints in Scientific Medicine" (1877) quoted in Bynum (1994)

cells and that this was because the drug had an affinity with the unsatisfied receptors of the cells attacked by the toxin. Since the cell was tiny and the drug was to stimulate the cell to regenerative action and the manufacture of anti-bodies Drury concluded, "If we could always choose the exact remedy, an infinitesimal amount would be sufficient every time"[39]. In short, explaining the modus operandi of the similimum at the cellular level justified the minimum dose[40].

Martin Deschere in 1897 also used Ehrlich's hypothesis regarding the elective affinity of drugs to explain the operation of drugs at the cellular level. Deschere claimed Ehrlich's work both legitimated and directed homoeopathic therapy. Whereas "modern" medical chemistry was accredited with demonstrating homoeopaths' long proclaimed fact that certain drugs acted specifically on certain organs, Ehrlich's hypothesis was cited to show that this elective affinity was not simply chemical or mechanical but the result of some vital principle. Deschere noted Ehrlich found blood cells' affinity for staining fluid diminished with the increasing age of the cells and that Professor Bunge of the University of Basle, Switzerland had demonstrated the existence of a vital principle in his widely read textbook on physiological and pathological chemistry[41]. Further, Deschere pointed out how the principle of elective affinity was highlighted by Darwin in his theory of Pangenesis, which stated that if the pollen of all known 10,000 compositae were simultaneously placed on the stigma of one species, this one would select with certainty its own pollen.[42]. From this Deschere concluded, "[...] a substance is only capable of producing a health disturbing effect upon such organs with whose cells it stands in elective affinity"[43]. This in turn bore out Hahnemann's substitutive principle (that in homoeopathic prescribing one disease was substituted for another) and for Deschere was"[...] the modus operandi of what is called the homoeopathic cure"[44]. Hence, Deschere called

[39] AIH Transactions (1903) p 101
[40] In 1648 Glauber noted that "a body did not have the same inclination to combine with every other" and in 1718 Geoffroy proposed the Law of elective affinity as being " Whenever two substances which have some inclination to combine with one another are combined with one another and a third which has more affinity for one of the two is added , then it will combine with that one and exclude the other"[40].
[41] Bunge (1902)
[42] See Hodge (2003) chapter three p 40 for further elaboration of this theory. AIH Transactions (1897) p 201
[43] AIH Transactions (1897) p 201
[44] AIH Transactions (1897) p 205

for the study of materia medica by means of pharmacological laboratories and vivisection to determine the exact point of drug action.

For homoeopaths the concept of the reverse action of drugs, acknowledged by both homoeopaths and allopaths alike, was synonymous with similia[45]. Indeed, R.W. Van Denburg showed by reference to the major allopathic works of the day of Hare, Bartholow, Ringer, Wood and Stille, that in all cases where allopaths advocated and used small doses, which they would have at one time have considered ridiculous, they did so in accordance with the law of similars[46]. Van Denburg quoted Stille as describing the physiological action of *aconite* in terms of oppressed breathing, with long continued use causing a quick pulse and great restlessness. Yet its curative action was claimed by Stille to be best where there is "inordinate activity of the circulation" and "inflammation of the respiratory organs"[47]. Also, *asafoetida* was noted by allopaths as both impairing and curing digestion, *arsenicum* causing and curing memory loss, causing and curing a certain type of fever, a certain asthma etc. *Belladonna* both caused and cured dilated pupils, headache, delirium, a scarlet rash, and *digitalis,* whilst in toxic doses was known to cause a great reduction in the pulse, was recognised by allopaths as useful in all forms of heart failure with a small, weak, irregular, feeble pulse. This wholesale adoption of drugs from the homoeopathic to the allopathic materia medica included *glonoine,* a compound formed from *glycerine* by *nitric acid.* Though first discovered by Sobrero in 1847 it was Constantine Hering (1800-1880), an American homoeopath, who first experimented with the substance as a medicinal agent and consequently published his discovery of *nitro glycerine* as a heart remedy in the British Journal of Homoeopathy (B.J.H.) in 1849. Coulter claims its first mentioned as a remedy in *angina pectoris* did not appear in allopathic journals until 1879 [48]. It remains in allopathic use today for this disease as *amyl nitrate.* In 1896 R.N. Foster noted the use of *nitroglycerine* "[...] for threatened cardiac failure in every hospital in the civilised world", [49] lamenting the conferring of special

[45] That being the case it is somewhat surprising that homoeopaths did not make more of this explanation as to why their remedies worked as well as those of their allopathic counterparts. Herein lay an easy explanation as to why allopathic remedies were palliative and not curative. See more on this in chapter four.
[46] Van Denburg (1896)
[47] Van Denburg (1896) p 159.
[48] Coulter (1973) p 264
[49] Foster (1896) p 155 In the true spirit of Whig historiography, contemporary history of medicine texts fail to credit Hering with this discovery.

honours upon a French physician by the Academy of Medicine in Paris for "[...] discovering the same long published facts"[50].

In short, Van Denburg claimed the adoption of homoeopathic drug use according to similia into allopathic practice was possible because of the dual action of drugs. Even when allopaths used drugs to palliate Van Denburg showed that this was in accordance with this dual action. i.e. homoeopaths and allopaths used the same drugs but to *opposite* effect. Indeed, homoeopaths went so far as to explain the phenomenon of the reverse action of drugs itself[51]. Chas Gatchell in 1903 used the theory of electrolytic dissociation to this end, claiming that a drug in material or crude form produced the opposite effect of that same drug in a diluted form. According to Gatchell this was because a drug in its crude state caused the electrically neutral molecules, rather than the ions (electrically charged atoms), to act upon the nuclei of the cell, and that, molecules had the opposite effect to ions. That is molecules *depressed* nutrition and cellular function whereas ions *stimulated* it. Further, according to this theory drugs in solution consisted, not of the divided particles of the original substance in its molecular form (as homoeopaths in the 1870s had mistakenly believed), but of ions[52]. Ions could be positively charged (cations) or negatively charged (anions). Thus the properties of the solution were not the properties of the original substance but the sum of the cation and anion. Hence all attenuated (diluted) drugs were solutions of ions and the action of the drug was always upon the nuclei of the cells, not the muscular fibre or connective tissue. Changes were thus wrought in the nuclei of the cell, which only secondarily affected its nutritive and functional activities. Such a theory placed Hahnemann's theory of dynamisation, long the object of allopathic ridicule, on a scientific footing, Gatchell claimed. The force that Hahnemann alluded to was actually electrical energy.

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[50] W.F Bynum (1994) for example , credits Benjamin Ward Richardson (1828-96)with discovering the vasodilatory effects of amyl nitrite which 'was subsequently used in the treatment of angina pectoris. p 123 Similarly, John Syer Bristowe (1827-95) is credited as recommending *amyl nitrite* specifically in angina pectoris but no date is given. Roy Porter (1997) neglects to give a date for its use in angina though he does note it as one of the few more successful remedies at the end of the 19th century.

[51] Though crucially homoeopaths did not use this principle to explain apparent allopathic successes, and the reasons why it was ultimately ineffective. I pick up this point again in chapter four of this thesis.

[52] Gatchell (1903) cited a paper presented to the Institute three years earlier by E Stillman Bailey, Professor of Chemistry at the University of Kansas to support his claims.

Foster also showed the operation of the dynamic dose had received further endorsement from outside the homoeopathic medical profession, claiming "Hahnemann is justified to the letter by the advance of science [...] even in relation to high potency prescribing"[53]. Citing a report in the New York Therapeutic Review published the previous year by the Pasteur Institute of New York, Foster described how Roullin was able to experimentally inhibit the growth of Aspergillus Niger (a species of wood fungus) with a solution of 1 part nitrate of silver to 1,600,000 parts water (the homoeopathic 3rd centesimal dilution) and that this organism would not live in water placed in a silver vessel even though no silver was detectable with the most sensitive reagents[54]. Naegeli's pupils were reported to have had the same experimental results with filaments of spirogyra, noting the plant could die in two ways; chemically by corrosion, or in dilute substances by what Naegeli coined "oligo-dynamic" or "little power"[55]. The journal noted that death occurred in 3 to 4 minutes in a solution of one part to 1,000,000,000,000,000 of water, recognising that in such dilutions there could not be more than one or two molecules of the original substance in each litre.

Like Gatchell, Foster suggested a possible alliance between the dynamism of drugs and the domain of molecular physics, stating, "It may be, and is most probable, that all poisonings and all cures are really molecular changes, rather than gross mechanical effects [...] when we consider the effects of molecular activity as known to science in many forms..." [56]. Similarly, W.H. Hanchett appealed to vibratory theory to explain the action of the similimum. The disturbance caused within human tissue by the dynamic drug, Hanchett reasoned, may be a disturbance of harmonious vibration. The "[...] same drug" it followed,"[...] in an attenuated form [could] change these pathological vibrations and establish natural vibration by giving nature a chance to re-establish her own vibrations, in other words, health"[57].

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[53] Foster (1896) p 147
[54] Foster (1896) p 147
[55] Foster (1896) p 147
[56] Foster (1896) p 156 It's interesting, if not worrying, that many attempts to demonstrate the action of homoeopathic remedies today are conducted at the molecular level and there have been suggestions that the sub atomic level is the site of action of the homoeopathic similimum. See Fisher (2003)
[57] Hanchett (1901) p 156.

Later, bacteriology was used to legitimate homoeopathic practice by means of Sir Almroth Wright's (1861-1947) Opsonic Index and its associate vaccine therapy[58]. Building on Metchnikoff's phagocytic theory Wright claimed that phagocytosis was aided by the action of blood serum on the leucocytes[59]. Wright later developed the method of measuring and increasing such immunity, a substance in the serum he termed "opsonins", meaning "to prepare food for"[60]. By use of the opsonic index a patient's immunity to a disease could be measured as well as their response to the therapeutic agent tracked. Indeed, for many homoeopaths, bacteriology and homoeopathy, or isopathy, were inextricably linked. The Opsonic Index was generally considered by homoeopaths to be a means of substantiating the homoeopathic Law whilst the allopathic bacteriologist Wright, with his ever increasing dilutions, was portrayed by the Institute as a homoeopath in disguise[61]. The homoeopath Edward Beecher Hooker highlighted the usefulness of serum therapy in hydrophobia in 1907, noting its departure from traditional allopathic reasoning of combating the disease itself. Such therapy, Hooker noted, served to "reinforce and strengthen the natural recuperative powers of the system, and that is just exactly what Homoeopathy has been claiming to do and which we believe it does do"[62].

By the early 20th century homoeopaths were forming an alliance between homoeopathy and Mendelian genetics. In 1912 T.G. Stonham, President of the British Homoeopathic Society (B.H.S.) and member of the Royal College of Surgeons, England (M.R.C.S.), presented his views on the link between the concepts of genetic inheritance and the homoeopathic constitution[63]. The most important point, Stonham argued, was that Mendel showed the living organism, plant or animal, consisted of a collection of separate characteristics. This transpired from Mendel's experiments, cross breeding dwarf and tall peas, which contrary to his expectations that such a mix

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[58] This was used by allopaths and homoeopaths alike. I refer to this in relation to tuberculosis treatment in chapter five of this thesis.
[59] Wright first made this claim in 1895.
[60] Almroth Wright was director of the Institute of Pathology at St. Mary's Hospital in London. I expand on the homoeopathic nature of Vaccine Therapy in relation to tuberculosis in chapter five of this thesis.
[61] Linn noted Wright's claim to use 1/2500 of a milligram of tuberculosis bacilli in treatment of the disease stating "Evidently he is climbing into the ranks of the high potency men" Hooker (1907) p 316
[62] Hooker (1907) p 61
[63] Stonham (1912). The list of members of the B.H.S. for 1911 shows the majority of homoeopaths belonging to the society were also Licentiate members of the Royal College of Physicians England (L.R.C.P.), of the Royal College of Surgeons (L.R.C.S.), the Society of Apothecaries (L.S.A.) as well as other medical professional groups.

would produce peas of intermediate size, produced only tall peas. Mendel concluded from this that within the pea genus, the tall were dominant whilst the dwarf genes were recessive. Stonham explained how this conception of dominance and recessiveness had been modified by the attacks of Weismann and Bateson on Darwin, both of who had argued against an easy gradation between intermediate forms of life. Subsequently, the experiments of De Vries, Correns and Tschermak later demonstrated, not so much dominance and recessiveness in inheritance, but the absence or presence of a factor that enabled dominance to operate. In the absence of this factor this particular "gamete" became recessive, Stonham pointed out. So, all peas were tall due to a factor for tallness and in the absence of this factor they would all be dwarf, there being no factor for dwarfness as such, just the absence of a factor for tallness.

Stonham stated that this "Law of Heredity" could be seen in human disease, deformity and structural and physiological departures from the norm. Stonham selected *brachydactyly* as illustrative, a disease characterised by a stunted body and absence of the middle phalanx of fingers and toes. Citing data collated by Dr Drinkwater, Stonham related how this disease manifested the Laws of genetic inheritance, viz; all affected individuals had an affected parent, that none of the unaffected individuals ever came to have affected descendants, and that in families where both affected and unaffected occurred the numbers of each were on average equal. Stonham concluded that the reason unaffected individuals did not pass on the condition to their descendants was because diseased individuals carried a factor which the normal ones did not. This became known as the absence/presence hypothesis. Stonham further made reference to the "Hapsburg protruding lower lip", and extensive night blindness in a family from Montpelier in the South of France[64]. The latter affliction of 2,000 persons had been traced to one individual, Jean Nougaret of 1637. Despite repeated marriages of his descendants to persons not suffering from the disease affliction had taken place according to Mendelian heredity.

The link with homoeopathy lay in the concept of the homoeopathic constitution or temperament allied with the vibratory theory of matter. First, Stonham argued that,

[64] Stonham (1912).p 15

the significant factor in the gamete (mature germ cell) must be infinitesimally small since a single germ cell contained a thousand such factors. Secondly, when by cross fertilisation the factor for tallness was put into the ovule of a dwarf pea something was added that enabled the plant to grow by a further four feet. Hence these factors are units of tremendous developmental "force", all forces having been agreed as simply vibratory differences in rate rhythm and amplitude. As such they attract in the food supply elements with the same vibratory frequency as themselves. Likewise drugs had been shown to have affinities with specific cells. Stonham argued that this was most likely due to their mutual resonance. Thirdly, the quality of the unit characters and their individual transmission by heredity accounted for the sameness of human nature throughout the ages and the constraints upon variety. Likewise homoeopathy had long noted how the polychrests (drugs of many uses) worked for a wide range of individuals in many different diseases over many generations and Mendel's theory explained why that made sense. Fourthly, drugs, as vibratory forces disturb the normal vibrations of the gametes and are henceforth transmitted to the offspring. This explained the inheritance of constitution.

In Stonham's opinion Mendel's Law allowed for groups of general symptoms caused by disease (deranged vibrations) to be transmissible in an intact state by means of a factor in the gametes. Hence, constitutions (as groups of symptoms and disease characteristics) were as inherited as eye colour. Mendels Law thus confirmed for Stonham the specificity of drug to disease according to similarity in action, and the greater importance to be attached to homoeopathic general symptoms[65].

Indeed, there was a sense within the homoeopathic community that their theory and practice had been scientifically and incontrovertibly proven. Early in the 20th century the French homoeopath Francois Cartier published his "Therapeutics of the Respiratory Organs" in which he outlined many of the proofs homoeopathy had enjoyed. "The law of similars is now scientifically explained." Cartier claimed, "therapeutic infinitesimals, the object of constant ridicule, are gradually being explained through the various applications of Opsonins, Colloids, and of the Anaphylaxis, and are likely to be further illuminated by what future investigations

[65] 'General symptoms' does not refer to any old symptoms, but those symptoms pertaining to the area(s) originally affected by the disease. Found in Stonham (1912).

may reveal"[66]. Cartier showed how yet another allopathic professor had sanctioned homoeopathy. Professor Huchard had claimed;

"From whatever source truth may arise, and however difficult it may be for us to grasp, we must accept it. Medicines act not only chemically, but also and especially produce physical effects simply by their presence. For bringing about these physical effects, we must use *weak doses, infinitesimals*, so reduced that they may correspond to a beginning of atomic dissociation" [67](italics original).

Further, citing the investigations of the homoeopath Dr Naveau, Cartier claimed homoeopathy was in accord with laboratory discoveries, since the former showed,

"Curing a disease homoeopathically is to employ the medicament which provokes reactionary, defensive processes the same as those of the disease, the unfolded phagocytosis, as well as the developed antitoxin being in both cases similar. In a disease treated homoeopathically, there is a double production of homogenous anti-toxin: that rendered by the agent of the disease, and that evolved by the remedy, which is homoeopathic to the disease. Hence a double defensive action, a double resistance, and a double curative power"[68].

Yet homoeopathy's most successful synthesis was between its practice of provings and pathology, physiology and anatomy. It was in these areas that homoeopaths conducted some of their most important and fascinating experiments.

The Role of Physiology in Reproving and Restructuring the Materia Medica

As well as finding explanations for the modus operandi of similia and the minimum dose, many homoeopaths considered a restructuring and reproving of the materia medica necessary at the end of the 19th century. There were three reasons for this; first, homoeopaths had always considered provings epistemologically superior to clinical evidence, reliance on the latter leading to the vacillation of professional

[66] Cartier (1919) p i
[67] Cartier (1919) p xiv
[68] Cartier (1919) p xviii

opinion regarding virtues of a specific drug. Clinical evidence was considered an adjunct to provings, which elucidated the action of a remedy, since a drug's physiological action was more discernible on a healthy than a sick person. Proving drugs on the sick meant the investigator would be unable to distinguish between the drug's action and that of the disease. Secondly, homoeopaths came to perceive error in their materia medica in the mid 1870s. Thirdly, homoeopaths considered the application of the principles of pathology and physiology as well as new laboratory diagnostic techniques to homoeopathy essential in establishing Hahnemann's "totality of symptoms" on which all accurate homoeopathic prescribing was based[69].

Synthesis would mean the removal of repetition (e.g. in patients recording the same symptoms in different words) whilst the anatomical grouping of symptoms produced by provings would clarify the text. This would make prescribing faster even for the experienced physician and would certainly be less daunting for the homoeopathic medical student. Harvey Dale, for example, suggested to the A.I.H. meeting of 1879 that symptoms within the materia medica should be ranked according to their therapeutic significance. Whilst there was some dispute over what should be regarded as significant, Dale suggested that mental and "peculiar" symptoms, that is, those not readily seen in prescribing or which ran contrary to expectation, should rank foremost[70]. So, *thuja (arbor vitae)* contains the strange symptom of the body (or the self) "being made of glass" and liable to shatter at any moment. This is a characteristic not shared by any other remedy. On the other hand *pulsatilla* contains the modality (something which changes a symptom) "worse from lying down", whereas in most cases of disease the patient feels better for lying down. *Pulsatilla* would thus always be a strong contender for the similmum where a patient reported this modality.

Harvey Dale at the 1879 meeting of the A.I.H. advocated the pathological study of the materia medica for synthetic purposes. Again, homoeopaths made use of Ehrlich's hypothesis of elective affinity, Dale claiming that subjective symptoms produced by a drug will correspond with the disease process or processes the drug sets in motion.

[69] Interestingly, allopaths came at the same time to be concerned with their own materia medica and the possible errors within it but dealt with this in a completely different way to homoeopaths i.e. they basically ignored it. This is dealt with in more detail in chapter three of this thesis.
[70] See chapter three of this thesis for the dispute over this issue.

The symptoms of *bryonia,* for example, such as stitching pain worse for pressure and movement could be explained by the *physiological* fact that *bryonia* caused inflammation of the serous membranes. The homoeopathic action of *pulsatilla* of causing a contraction of blood vessels and capillaries, which Wilson Smith noted in 1901, was the reason why the *pulsatilla* patient felt better outdoors. Physiology explained that, because air had the same action on the blood vessels and capillaries as *pulsatilla,* the patient felt better outdoors because she *was* better. As Smith put it; " Explain that to the student, *have him see the Homoeopathic relationship of the drug to the pathological condition,* give him the reason why for the thing he does and there is no danger of his going to the old school for his therapeutic pabulum"(italics added)[71]. Hence, as far as the likes of Smith and Dale were concerned proper study of the materia medica required a laboratory-based knowledge of physiology and pathology, gleaned from human provings and experiments on animals to determine the point of drug action.

In 1892 William Owens presented a forceful argument for the primary place of pathology in homoeopathic therapeutics. Owens conceded with regret that a large proportion of the homoeopathic profession paid too little attention to pathology, since next to materia medica, pathology was the sheet anchor of homoeopathic therapeutics and the basis of all rational medicine. Owens considered pathology simply an extension of the physiological process, which had transcended its normal function, so becoming abnormal[72].

Owens claimed attention to pathology did not negate Hahnemann's principles since "Hahnemann teaches that 'drugs produce disturbances in the functions and feelings of the organism, which we call disease'" and that, hence, a thorough knowledge of pathology enables the homoeopath to comprehend the aetiology of morbid processes "[...] and would greatly aid in selecting the similimum to arrest it"[73]. Further, since Hahnemann claimed drugs affected the organism "[...] we should study the special

[71] Part of subsequent discussion to C Wesselhoeft's paper (1901) p 619
[72]Owens (1892)
[73] Owens (1892) p 536

tissues for which each and every drug has an affinity, or relation." Owens concluded all rational treatment was based upon this[74].

Citing the researches of Mattucii, Claude Bernard, Hammond, Beard, Brown – Sequard and others, Owens claimed an analogy could be found in experiments demonstrating the influence of electricity and magnetism over the functions of the organs, increasing or diminishing them to an abnormal degree. Likewise a careful study of pathology, aetiology, semiology, history and comparisons with morbid processes would form an unquestionable basis for homoeopathic therapeutics. Owens hoped;

"These studies will show us by what processes *cinchona* induces a state of chill, or relieves it, [...] and why the blood undergoes certain pathological changes under its influence [...] and why and how it arrests gangrene and aids nature in restoring indolent ulcers to a healthy state [...] By the study of pathology we may learn how *secale* arrests haemorrhages and causes gangrene at the vascular periphery, and why it induces contraction of the gravid uterus, of the intestines and other hollow, non-striated muscular organs [...]"[75].

Thus the task for homoeopathy in the future was to "[...] supply the connecting link between these aetiological conditions and drug pathogenesis". Indeed, homoeopathy was best placed to do this because, as Owens reminded delegates;

"Drug impressions are made upon molecules rather than masses. It is a well recognised fact in physics that many of the subtler and apparently feebler forces in nature are the most efficient in disturbing physiological processes, and hence it is that the more minute particles of drug substances, and even their unperceived and undetectable dynamic forces, are most efficient agents in restoring the functions or normal physiological processes [...]"[76].

[74] Owens (1892) p 537
[75] Owens (1892) p 541
[76] Owens (1892) p 543

As far as Owens was concerned, homoeopaths were approaching *the* solution of the pathogenetic problem of the pathology of drug effects.

Indeed, in 1907 John Preston Sutherland claimed, "Homoeopathy is established from the laboratory. For the application of the simple rule of similars, necessitates primarily an intimate and exact knowledge of drug pathogenesy [...]. Drug pathogenesy must be mastered in the laboratory before drug prescription can be made in the clinic"[77].

As Foster pointed out in 1896 Hahnemann's concept of provings on healthy humans linked therapeutics and pathology since Hahnemann claimed that provings showed that drugs arouse different organs, or different parts of the same organ or even distinct functions and that, in disease, drugs must be given which would act upon the part, organ or function that was diseased. Foster claimed this to be the "anatomical demonstration of the law of similars"[78].

However, the reproving exercise was acknowledged as revisionist. Eldridge C Price addressing the Institute in 1896 considered Hahnemann's rules leading to the similimum in need of revision, though not fundamental alteration, in the light of scientific innovations. Price stated;

"Hahnemann's rules are not sufficiently definite and stringent in the directions of preliminary health records " nor do they consider "[...] the necessity for the examination of provers' objective and subjective manifestations by specialists", i.e. psychologists and others with specialist knowledge not available in Hahnemann's day[79].

Price considered Hahnemann's rules far behind the "necessities of science" recommending blind trials in provings so that subjects did not know which drug they were taking. Further, Price suggested provers should be classified according to their degree of health and pathology in relation to constitutional defects. Reliance on being "masters in observation" to distinguish drug action from symptoms of the original

[77] Sutherland (1907) p 75
[78] Foster (1896) p 157
[79] Price (1896) p 250

disease was inadequate he asserted, so that "[...] it behooves us, as exponents of the art of medicine and of the science of homoeopathy to encourage [the]Hahnemannian [spirit of progress][80].

Likewise, William Boericke endorsed Hahnemann's assertion found in section 18 of The Organon that the totality of symptoms should be the sole indication in the choice of drug but that development in pathology and physiology had extended the boundary of symptom totality. There was a need to distinguish between subjective and objective symptoms, the former Boericke defined as those related to the physician by the patient and the latter as those discernible by the physician via instrumentation, physical examinations, chemical and microscopical analyses etc. In this respect especially, Boericke claimed, homoeopathic symptomotology had the potential for considerable expansion, such receiving unprecedented precision, with the discernable totality of symptoms being more complete and comprehensive than in Hahnemann's day. Boericke considered that homoeopathy had previously operated according to greater and lesser approximations of the true similimum. By expanding the pathological basis of symptomotology homoeopaths would be greatly aided in being directed to groups of remedies sharing pathological similarity, thus simplifying prescribing. Boericke further recommended the ranking of symptoms according to their therapeutic significance, with mental and peculiar symptoms foremost [81].

Likewise the presidential address of Benjamin Bailey to the A.I.H. in 1889 claimed the reformation of the materia medica rested upon proving drugs in the biological, microscopical and chemical laboratory, the purpose being to establish the well defined indication of a remedy[82]. Rather than diluting homoeopathy this would make the prescription exact rather than general, since the action of remedies could be detected in changes in fluids of the body. This project, Bailey claimed, was not contra Hahnemann, but would finish the work he had started.

Knowing the etiology of the disease was also important to homoeopaths. Boericke suggested that knowing the immediate or exciting cause of a disease facilitated

[80] Price (1896) p 253
[81] Boericke (1896). In the event, James Tyler Kent (1849-1916) in the first decade of the 20th century popularised this way of constructing repertories which was continued in the 20th century by M Tyler.
[82] Bailey (1889)

determining the similimum. Boericke reminded his colleagues that Hahnemann had taught this very principle in section five of The Organon. Thus, in chronic disease the first or oldest symptoms were crucial in determining the causative chronic miasm or taint, of which Hahnemann specified three and underlay all disease- psora, syphilis and sychosis[83]. Boericke concluded, therefore, that Hahnemann's rules guiding practitioners to the similimum required considerable expansion in the light of modern scientific diagnostic techniques and knowledge, namely, pathology, physiology and microscopical analysis. The "impressionist method", Boericke believed, should only be employed by those of experience and gifted with the requisite perceptions. Whilst participants in the discussion of Boericke's paper minimised the significance of the chronic miasms, all agreed that "totality" was the key to success in prescribing[84].

As well as providing a link between Hahnemann's doctrine of the miasms and diagnostic technologies late 19th century homoeopaths fused material pathology with high dilutions. T.G. Stonham in his address to the British Homoeopathic Society (B.H.S.) in 1911 noted how *sodium chloride's* regulation of osmotic tension and the blood's specific gravity demonstrated the similarity between the salt's physico-chemical properties and its homoeopathic action, proving both "[...] the truth of the Law of Similars and of the power elicited by dynamization"[85]. John Sutherland similarly claimed that pathology was only altered or morbid physiology and showed that diseases could be divided into three groups; first, acute, infectious and self-limiting diseases, secondly, chronic diseases, leading to dissolution (a polite word for death!) where only palliation was possible and, thirdly, ongoing chronic diseases where neither spontaneous recovery nor dissolution occurred. In this latter category, Sutherland claimed, homoeopathy had its greatest opportunities since recovery was more likely the result of medical intervention. Indeed, homoeopathy had already enjoyed its greatest successes with this category of disease. More comparative statistics were thus necessary to further establish these successes. Some homoeopaths

[83] Hahnemann (1828) concluded from his clinical and experimental experience that all disease was the result of three chronic miasms, syphilis, sycosis referred to gonorrhoeal infection but principally psora- otherwise known as' the itch'. Interestingly, Boericke, whilst advocating pathological and microscopical analysis subscribed to Hahnemann's miasms in determining the similimum by focusing upon the original cause of the disease. This goes against current historical understanding that members of the A.I.H. as mainstream homoeopaths and 'materialists' ignored them..

[84] See chapter three of this thesis.

[85] Stonham (1911) p105.

were evidently still not taking heed in 1901 since John L Moffat asked, "Why do you ignore pathology? I believe pathology is a part of the totality of symptoms".[86] Even the "high dilutionist" James Tyler Kent (1849 –1916) saw the value in pathological and post mortem findings for homoeopathy since on ethical grounds provings could not be carried out on humans to the point of tissue damage[87]. Hence morbid pathology provided vital information to the homoeopaths on the pathological effects of drug poisonings and thus on the action of a drug.

As a consequence of this scientific consciousness the American Homoeopathic Ophthalmological, Otological and Laryngological Society (O.O.L.S.) was commissioned to pilot re-provings in 1900[88]. With a new emphasis upon objective, observable and measurable symptoms and signs not simply the physician, but the specialist physician alone, would be sufficiently competent to give the symptoms their correct interpretation. This signalled a sea change commensurate with the professionalising project of medicine generally since, not only was the provers' epistemic authority reduced by this move with the laboratory becoming the key (but not sole) location for knowledge production, but the body became replaced by the test tube, slide, petri dish or photographic plate as the new media upon which that knowledge was inscribed[89].

At the same time as these renewed institutional provings there was a call for restoring provings as part of the medical college curriculum. Deschere's response to Price's 1901 paper was the compulsory reproving of two drugs per year by healthy medical students also[90]. This would have a two-fold effect he claimed. First, students would become convinced of the reality of the symptom producing power of the homoeopathic drug. Secondly, improvement, purification and increased accuracy of the materia medica would be achieved. This comment was made in the context of a discussion concerning the lack of conviction in using the materia medica by

[86] In discussion subsequent to Wesselhoeft's (1901) paper p 617
[87] Kent (1906). See also Nicholls (1988) p 265.
[88] Demonstrating the close connection between American and British homoeopaths Howard Bellows rationale for re-proving was re-printed in the British M.H.R. of 1900 .
[89] Foucault (1963) chapter 6 section II seems to me to touch on this process.
[90] Martin Deschere chaired the discussion following Price's (1901) paper pp 595-597. The waning faith in drugs, the topic of Price's paper, was attributed to the increasing success of surgery.

homoeopathic graduates and their subsequent lapsing into using other methods in practice.

In the years following Price's call Bellows presented the homoeopathic O.O.L.S.'s reports to the American Institute at its annual convention[91]. Making reference to the period of epistemological uncertainty from which homoeopathy had just emerged, Bellows stated that what had been under test had been both a single drug (*belladonna*) and the method of drug proving itself. He recommended abandoning provings by means of local boards since this weighed heavily on the busy general practitioner. Rather, an Institute of Drug Proving should be founded and specifically equipped for testing drugs, possibly a medium sized house in a city with easy public access near some large hospital, dispensary or medical college seen as a medical centre[92]. A full time director should be appointed to oversee all provings and coordinate the efforts of specialists and analysts. Such an institute should be incorporated with a board of trustees, fifteen in total, ten of whom should be physicians prominent in the Institute, five of whom should have prominence in the business of the city housing the proving centre. In short, "[...] men who stand so high in the public estimation throughout the country that their very names guarantee the solidity and success and scientific character of the institution under administration" [93]. Bellows claimed funding from some source could be expected in a time of substantial investment by Government, the Carnegie Institute and the Rockefeller Institute for Medical Research into medical science, though it was not expected from these sources particularly and should include the proving of the component alkaloids of the polychrests to ascertain their individual spheres of therapeutic action[94]. Finally, Bellows concluded provings made on animals to ascertain the sphere of drug action on specific organs and tissues should be kept separate from human provings. Results should be published annually and be furnished to the profession as near as possible at cost price[95].

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[91] Bellows (1903) and (1904)

[92] This was partly a re-run of arguments first presented in the 1870s. See chapter three of this thesis for more on this..

[93] Bellows (1903) p 169

[94] This appeal to localised power structures by homoeopaths at this time is important and I return to this in chapter six.

[95] Hence vivisection, like intravenous vaccination, had both opposers and adherents within homoeopathy.

Interestingly, Bellows' stated rationale for embarking upon such re-proving in 1900 was not to convince the homoeopathic profession, which succeeded with even an imperfect materia medica, it was not to sway the public, who had already witnessed the effects of homoeopathy within their families. Rather, it was to convince their colleagues in the "old school" that attenuated drugs acted therapeutically and that the materia medica was not simply a collection of wild imaginings[96]. Proving Boards were subsequently inaugurated in eleven American cities where *belladonna* was administered to fifty- one male and female provers over a period of three years, the results of which were later published [97].

In Britain in 1898 the British Homoeopathic Society (B.H.S.) called (not for the first time) for the establishment of a committee to resume provings of both old and new drugs with the new means of measuring objective symptoms[98]. In keeping with their American counterparts, homoeopaths in Britain did not intend such measurable objective symptoms to displace the subjective ones, but were rather intended to augment patient narratives.

Consequently, the Monthly Homoeopathic Review (M.H.R) of November 1st 1899 published a series of "drug studies", the first being on *aloe* conducted by Dyce Brown, consultant physician to the L.H.H. and modelled on Allen's "Encyclopaedia" where symptoms were arranged anatomically[99]. Brown considered the proving a success though he did not say on whom or how the proving was conducted. From the trial Brown concluded that *aloe* should be more extensively used in inflammation of the digestive tract[100]. Reflecting a seeming lack of opportunity to prove drugs, British homoeopaths called for allopaths to test drugs on the healthy and from time to time their call was answered. The M.H.R. of 1901 published a "modern proving" (allopathic) of *sodium salicylate* by the Assistant Professor of Pathological Chemistry at University College London aided by a grant from the B.M.A. Whilst using only two subjects for the proving Goodbody was able to show the action of *sodium*

[96] Bellows MHR (1900)
[97] Bellows (1906).
[98] Pope et al (1898) p 708
[99] Brown (1899)
[100] Brown (1899) p 766.

salicylate was one of increasing the output of both solids and liquids in the urine whilst having no appreciable effect upon the digestions and the absorption of either protein or fat. The journal recommended Goodbody's methodology and noted the objective symptoms that his experiment had added to the subjective ones of the homoeopathic materia medica, in his view making the pathogenesis of the drug "well-nigh perfect"[101].

The editors of the M.H.R. relayed the American call for provings to their readership. In 1901 in an article by W.S. Searle of Brooklyn was featured, requesting funds for a college of pathogenesy to be established, one having botanical, pharmaceutical, pharmacological, and chemical laboratories, a well equipped library, an examination room, with all the instruments of modern pathogenetic and diagnostic research, a record room with a small printing outfit and a good sized lecture room. The M.H.R. concluded; "This appears to be the only practicable and feasible way of developing our materia medica. Let us set to work to interest our wealthy patrons in the good work. Let the Institute take up the matter. Now is the time Washington is the place". Such an endowment should be "[...] sufficient to employ and train men, not only to prove, but to conduct the researches, edit and present them to the profession"[102].

The M.H.R. detailed the methods of experimentation that should be adopted to avoid the following positive errors, namely, (1) the ascription of a provers idiosyncrasy to a drug, (2) the incorporation of symptoms of a disease in a drug pathogenesy (3) the adoption of cured symptoms as pathogenetic (4) the inclusion of mechanical or gross chemical effects (5) the use of false terminology – anatomical, pathological or theoretical[103]. To this end patients were not recommended as experimental subjects. Further, a period of probation was recommended whereby provers' details were kept in a diary for two months before the commencement of the proving. For women this period was recommended as spanning two menstrual cycles where possible. Negative errors should also be avoided, namely, the omission of symptoms, especially of the finer shades, the omission of conditions influencing a symptom, known as

[101] Goodbody (1901). The Review praised Goodbody's experiment despite the fact that he used only two experimental subjects.
[102] Pope et al Sept 2nd (1901) p 562
[103] Many of these errors were not viewed as 'positive' by American homoeopaths as will be shown in the next chapter.

"modalities", and ensuring a thorough investigation by extending it over a period of sufficient time, adopting a wide range of potency, and a large number of provers of each drug[104].

Showing that the need for re-proving was accepted across the international homoeopathic community the Central Society for German Homoeopathic Physicians made its intention known at the same time to embark upon an eight year reproving programme whose results would be arranged according to botanical and zoological parts of the drug. Reflecting the anxiety felt by British homoeopaths in fine tuning their proving methodology Robert Dudgeon submitted to the M.H.R. of 1899 a summary of the working practice of the Berlin society and the proposed layout of the subsequent materia medica, in the hope that it would instruct, "[...] the British Society's committee both as to what they should do and what they should avoid" [105]. Part of this restructuring included the listing of symptoms alongside physiological data. This would include the results of experiments on animals as well as experimental pathological records, followed finally by a list of literature, which Allen and Hughes were especially recommended. To be omitted from the symptoms were those considered the result of auto-suggestion and those that appeared to result from the course of natural disease i.e. something from which the subject was already suffering. Dudgeon concluded, "On the whole the work of the Berlin Society merits the careful consideration of our colleagues who are engaged in the production of our materia medica" [106].

How Homoeopaths Used Vivisection to Expand the Physiological Basis of the Materia Medica

Homoeopaths used vivisection to establish "objective", or physical, symptoms. In 1888 W. Y. Cowl alluded to the use of the frog to homoeopathy. Citing the experiments of the Dutch investigator Lenwenhoek, Cowl claimed physicians now had a clear and comprehensible description of the capilliary circulation of the blood. Cowl clamed, by virtue of its natural mode of healing, such physiological findings

[104]Finer shades were often the "peculiar", "curious" or rare symptoms and were considered the most valuable by many in homoeopathic prescribing.
[105] Dudgeon (1899) p 5
[106] Dudgeon (1899) p 9

were particularly useful to homoeopathy [107]. Van Denburg called upon the Institute in 1896 for the further testing of medicines upon man *and the* "lower animals". Such provided an indispensable key, he claimed, to the curative operation of drugs in disease.

The B.J.H. also called in 1874 for the proving of drugs on both humans and animals. Noting a series of provings about to begin in Vienna "[...] upon animals in various localities" the journal noted "[...] approved zoologists, chemists and histologists have promised their advice and aid in the experiments to be conducted by skilled provers of medicine"[108]. Likewise Richard Hughes brought to the attention of the profession in the B.J.H. of 1874 that his manual "Pharmacodynamics" attempted to enhance the materia medica by including insights from toxicology, from the physiological laboratory and from therapeutic experience. Clinical records he claimed would show the bearing of pathogenetic symptoms upon the phenomena of disease. In this way drug action was compared with the action of disease so that knowledge of the constituents of drugs, their action, their characteristic features and their effectiveness could be ascertained.

The London based homoeopath J Galley Blackley reported in the Transactions of the B.H.S. of 1876 the results of experiments he had carried out using material doses of *opium.* Blackley claimed his experiments had been inspired by the reports of Mathiessen and Wright in the Proceedings of the Royal Society seven years previously. Mathiessen and Wright had discovered that when morphine was treated under pressure with strong hydrochloric acid, it produced "apomorphine " Blackley recalls how "Through the kindness of my friend Dr Wright I obtained a small quantity of the salt, and commenced a series of experiments upon it, the first experiment being tried upon myself"[109]. In this proving, for which Dr Wright remained present, Blackley injected ten minims of a 10% (homoeopathic dilution of 1C) of *apomorphine* under his skin. The drug made him feel giddy and nauseas and ended with him vomiting and fainting, remaining unconscious for five minutes. Inspired by his success Blackley then experimented on a patient, who experienced similar, though

[107] Cowl (1888)
[108] Drysdale et el (1874)
[109] Blackley (1876) p 42

less dramatic, effects. After noting similar results from continental experiments on both humans and animals by Siebert, Reigel, Bohm, Blaser, Quehl, Loeb, Moerz and Rabuteau as well as those of the more local Dr Gee at St Bartholomew's in London, Blackley relayed the details of his own experiments with the drug on cats. Like Siebert et al, Blackley found larger doses were required to produce the same symptoms in animals than was required for a human subject. Also, all experimenters agreed on the action of the drug. Blackley used a fifth to a third of a grain on his animal subjects to induce vomiting as well as a host of other symptoms and like Gee and Loeb, found *apomorphine* to be an emetic, especially useful in cases of poisoning. At the request of Dr Wright, Blackley used the same procedure to test *diapomorphine*, an intermediate compound between morphine and *apomorphine*. Blackley's cat produced symptoms of dilated pupils, salivation and attempts to vomit. The next day it was quite well. Between them Wright and Blackley determined the essential physiological action of *opium* and its derivatives. Blackley conceded that more experimentation needed to be done before conclusions could be drawn on a connection between the chemical constitution and physiological action of these drugs. These experiments also signify a certain replication, if not collaboration, between homoeopaths and other experimental researchers[110].

By such experiments homoeopaths came to link physiology with drug action. For example, *glonoine or nitro-glycerine* acted on the head, heart and respiration, the results of experiments on animals being published in the B.J.H[111]. *Bryonia* affected the mucous membranes, *sepia* and *lilium tigrinum* the uterus, *hydrastasis canadensis* the skin especially in cases of jaundice and erysipelas, *mercury* the teeth and salivary glands and was of benefit in diphtheria, strumous conjunctivitis, sclerotitis, kerutitis and ulceration, *lycopodium* the liver, *berberis* the kidneys etc.

Indeed, homoeopaths were keen to distinguish between effects of remedies in different potencies as well as effects of closely related drugs. So, Alfred Pope distinguished between the effects of the *vapour of mercury* on the organism compared

[110] Blackley noted that one of the problems with the investigations of his predecessors, especially those of Gee, was that they had been inconclusive, with the drug producing a.wide variety of symptoms. Blackley's investigation was aimed at classifying and making sense of the symptoms produced by the various derivatives of opium, particularly the physiological differences between dimorphine, tetrapodimorphine, tetramorphine and octapotetramorphine.
[111] Hering (1849)

to its *salts*[112]. Pope found *mercury* in any form acted on the throat (hence its usefulness in diphtheria) but that *mercury vivus* produced simple ulceration of the mucus membrane, *mercury solubilis* produced ulceration with pain when swallowing, the *proto-iodide* drugs inflamed the follicles, whilst *biniodide* caused in addition to this symptom swollen tonsils.

Homoeopaths also used allopathic provings to demonstrate the point at which a drug reversed its action[113]. The Review of 1876 contained an article on a B.M.A. funded allopathic proving to determine the effect of *mercury* on bile secretion. The experiments (carried out on dogs) showed that small doses of *mercury* did not influence bile flow whilst large ones did, diminishing it, as well as weakening the heart and rendering it irregular [114].

Accidental poisonings were also useful. The homoeopath Edward Blake presented one of his clinical cases, which revealed in much detail a proving of *vespa* (the wasp sting)[115]. Blake's patient was 31 years of age when the wasp stung him which led to skin eruptions, inflamed tonsils and back pain. Physical examination showed dullness at the apices of the lungs, and pressure over the kidneys. Microscopic analysis showed copious "blood disks" in the urine (haematuria). Two years of homoeopathic treatment combined with surgery brought some relief but no cure until the patient died in April 1875. A post mortem conducted twenty -four hours later revealed miliary tubercles in the lungs, enlarged and flabby kidneys, and congestion of the ureters and bladder. Blake concluded that homoeopathic *vespa*, like most animal poisons, had a strong elective affinity with the throat. Further, the remedy's action closely resembled that of *apis* (the bee sting), which was also useful in acute renal hyperaemia and congestion of the kidneys, but not Bright's disease. From the post mortem therefore, Blake concluded that *vespa* was therapeutically indicated where there was a hyperaemic (excess of blood) condition of the kidneys without grave organic change

[112] Pope (1902)
[113] The MHR claimed allopaths failed to appreciate the reverse action of drugs by relying on physiological doses.
[114] Pope et al (1876)
[115] Blake (1875)

Medical Techniques and Technologies

Just as homoeopaths sought to revise their materia medica along pathological and physiological lines so they used new technologies for diagnosis and extended their application. The pioneering homoeopathic surgeon William Helmuth, mentioned above, is of particular interest and importance since his reputation, even among allopaths, did not cause him to lose his homoeopathic identity. Reviewing Helmuth's long and distinguished career, Benjamin F Bailey reminded the Institute in 1905 that Helmuth was a man whose surgery was second to none in his day; one who was looked up to by the highest in the social, political and educational world. He combined his surgical work with homoeopathic treatment of every condition he treated[116]. Thus, Helmuth demonstrated that homoeopathic therapeutics was compatible both with surgery and pathological anatomy.

W.H. Winslow claimed in 1879 the microscope was to biology what the telescope had been to astronomy asserting the former's real utility was not as a scientific enigma nor plaything but an instrument that had the potential to greatly enhance the work of the general practitioner and surgeon[117]. Not only did the microscope enable practitioners to see crystallisation in progress, and frequently to name the element or combination from the form; it also revealed adulterations in medicines and food, and the characteristics of homoeopathic triturations (grinding of a drug with a mortar and pestle with alcohol and/or sugar of milk). Winslow claimed the greatest potential in using the microscope lay in discerning more accurately the clinical signs of disease, using the example of the homoeopathic symptoms "red sand in urine" as an example. Winslow claimed such "red sand" deposits had been demonstrated by the microscope to be uric acid. The microscope had also shown that the appearance of "red sand" in the urine could be the result of a variety of pathological conditions; amorphous urates becoming coloured by biliary matter indicating vicarious action of the kidneys and hepatic disorders, precipitated salts of urine mingled with blood corpuscles indicating blood from the vesical or urethral mucous membrane. Subjective symptoms may differ in each of these three cases so that the similimum would differ for each. The same prescription would thus lead to clinical failure, or in Winslow's words be, "[...]

[116] Bailey (1905) p 101.
[117] Winslow (1879)

unscientific, unhomoeopathic and a leap in the dark"[118]. Winslow suggested the microscope in general practice could serve a preventative role, detecting early those morbid processes that had not yet proceeded to subjective symptoms, revealing perhaps the presence of morbid growths and malignant tumours. When such were detected and removed the microscope enabled the physician to "[...] classify it, and derive from this a certainty in prognosis, which the simple clinical characters can never furnish". Failure to make technological innovations such as the microscope a part of every day clinical homoeopathic practice, Winslow thought, would leave the homoeopath to find "[...] he is falling behind in the race for professional distinction, and losing caste with the discriminating public" [119].

A.B.Grant gave further practical application to Winslow's claims in 1896 when he drew upon the experiments of Metschnikoff. Grant noted how the latter had demonstrated that insertion of infected tissue under healthy skin in a mouse or rabbit produced within a few hours the area surrounded by wandering cells from the mammal.[120] Grant suggested that where bacilli became so numerous in the organism's blood that the destruction of ameboid cells could be seen, the homoeopathic physician could be convinced that the correct remedy had been selected.

The X –ray was another technological innovation adopted by homoeopaths for both diagnostic and curative purposes. In 1907 A.E. Smith presented his findings to the Institute on the use of the X- ray in pain relief.[121]. Though not claiming to understand the reason for its effectiveness, Smith related success in cases of rheumatic lesions, plueritic and intestinal adhesions, lumbago and other painful conditions. The ensuing discussion revealed other homoeopaths had used the new technology in cases of psoriasis, torticollis, muscular contractions and even after removal of a cancerous breast, one homoeopath considering (interestingly) the X- ray instrumental in preventing the return of the disease. A principal rationale for using this technology seems to have been the undesirability of using opiates. Stephen Birdsall, after an explanation of the physics behind the new technology, reported his use of X-rays in general skin diseases with good results, especially in sarcomatous conditions and

[118] Winslow (1879) p 38
[119] Winslow (1879) p 39
[120] Grant (1896)
[121] Smith (1907)

various forms of ulceration.[122]. Such became the extensive use of X- rays in therapy that Allen included a proving of it in his work on the nosodes[123].

Homoeopaths also sought ways to administer the similimum more effectively, especially in line with their contention that it operated at the molecular or sub-molecular level. Here the synthesis of "science" (in this case chemical physics) and homoeopathy changed homoeopathic practice. Charles Hayward, surgeon to the Ear Nose and Throat Hospital in Liverpool suggested the homoeopathic infinitesimal dose could be more effectively administered by ionisation[124]. After describing the nature of "ions", Hayward concluded that "[...] matter, in its last analysis is identical with electricity [...] whether we have been unconsciously liberating and utilising these ions for the last hundred years or not, a vista of their usefulness [...] is bound up in them [...]"[125]. Hayward described how when ions are made to travel in a circuit they have the power of breaking up and carry along with them drugs, thereby conveying infinitesimal portions of medicines into the minutest cells of the body. Hayward claimed this led to far more effective results than the traditional methods of ingestion and injection of remedies. Noting a specifically useful application Hayward suggested a 1% solution of cocaine passed into the tissues via a soaked pad on the skin produced anaesthesia far beyond that obtained by hypodermic injection of even a maximum dose

Homoeopaths even developed some of their own medical technologies which were widely adopted and recognised at the time. One such was the sphygmograph or pulse-tracing machine. Whilst the machine had a long history Robert Ellis Dudgeon (1820-1904), a London based homoeopath, invented a small, portable version in 1880, 3/8 in by 2 1/8 in and weighing 4 oz Dudgeons'sphygmograph was applied to the wrist for use in general practice[126]. Dudgeon explained that taking the pulse simply with the finger revealed only its rate and marked deviations in strength from the norm, but that the sphygmograph revealed much more[127]. First, the sphygmograph showed the component elements of each pulse beat in a highly magnified form, their relative

[122] Birdsall (1907)
[123] Allen (1910)
[124] Hayward (1911)
[125] Hayward (1911) p 46.
[126] Dudgeon (1882)
[127] Dudgeon (1880)

proportion to each other and the degrees of deficiency or excess in each. Secondly, the sphygmograph was able to reveal the minutest irregularity in duration and exact strength of arterial pressure of a large number of beats. Thirdly, the sphygmograph made the pulse recordable and hence comparisons could be made over time with the same individual and the effects of various diseases and drugs on the pulse could be recorded and researched.

Later, Dudgeon published the results of his research into "stammering heart" which he defined as "[...] irregular action without ascertainable organic disease, valvular or muscular."[128], including multiple tracings which showed the intermittence of the pulse caused by various diseases. Such intermittency of the heartbeat indicated, Dudgeon claimed, the necessity of a heart tonic in acute disease, though the patient often did not notice such intermittency. Through his research, Dudgeon came to distinguish between a "stammering" and "stuttering" heart, the former being harmless, the latter being noticed by the patient and more serious. Dudgeon considered this distinction essential since incorrect diagnosis of heart disease depressed the spirits and activities of many a patient unnecessarily. Through several case studies Dudgeon demonstrated the difference between normal heart tracings and a variety of abnormal ones, concluding that palpitations were nothing more than a stuttering cardiac action which often righted itself spontaneously, though *digitalis, strophanthus, cactus* or a glass or two of wine were often effectual. Tracings were also able to show the efficacy of these remedies. The most important application of the sphygmograph for Dudgeon was the *dismissal* of organic heart disease. Once reassured that their irregular heart was the result of only stammering, and not stuttering, heart most patients could lead normal active lives. Dudgeon expressed the wish that his innovation would lead to a far wider use of the sphygmograph in general practice and further research into heart disease. Indeed, H.E. Deane, Assistant Physician to the L.H.H. built on Dudgeon's work by publishing recordings of a variety of respiratory pulse curves[129]. Using Dudgeon's machine Deane found that in people accustomed to regular forms of exercise the pulse rate usually doubled after exertion, and sometimes trebled within 40 or 50 beats, a rate of 170 or more being usual immediately after exercise.

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[128] Dudgeon (1893) p 3
[129] Deane (1911)

From a 21st century perspective Dudgeon stands on the side of the losers of history so it is no surprise that standard history of medicine texts and reference works fail to mention his contribution to the development of this technology and its discoveries, E. J. Marey (1830-1904), Karl Vierordt (1818-84) and S. Riva-Rocci (1863-1937) generally receiving the credit instead [130]. This is despite the fact that. Dudgeon's medical technological innovation was acknowledged *at the time,* gaining him first prize at the 1881 International Medical and Sanitary Exhibition in Paris.

Homoeopaths' Use of the Numerical Method

A third way in which homoeopaths attempted to legitimate their practice and place it on a scientific footing was by means of clinical statistics. John Sutherland claimed that the clinical efficacy and superiority of the Law of Similars could only be proved from a "rigidly and absolutely scientific standpoint", a scientific solution, presenting itself only through "scientifically establishable statistics", that is, the numerical method of comparison combined with clinical experience[131]. True to that conviction homoeopaths regularly published comparative statistics relating to institutional performances.

E M Kellogg of New York showed that comparative mortality rates for the cities of New York for 1870-1, Boston for 1870-2 and Philadelphia for 1872 demonstrated the superiority of homoeopathic therapeutics. Allopaths had criticised Kellogg in previous years, claiming comparison had to be made between the two schools in terms of ratios and not absolute numbers and that homoeopathic statistics were invalid because the numbers of patients treated by each school were not included. Kellogg acknowledged this accusation as perfectly valid yet asserted that taking the treatments of both schools in three large cities *en masse* made the statistics comparable since it was safe to assume that physicians from both schools on average treated the same numbers of patients. Kellogg was thus able to conclude from an analysis of the data that where homoeopathy lost ten patients, allopaths lost seventeen[132].

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[130] Porter (1997), for example, pp 344 and 581

[131] Sutherland (1896) p 191

[132] Kellogg (1873) In the three cities in the years listed above allopaths numbering 3267 in total lost 54, 679 patients , whilst homoeopaths numbering 605 lost 5903. The exact ratios were 9.75 to 16.73.

Walter Cowl compared the performance of the homoeopathic hospital on Ward's Island, New York and the allopathic hospital on Blackwell's Island known as "Charity"[133]. The hospitals were comparable since both were supported entirely by public charity and under the care of the Commissioners of Charity and Correction Both received sub- acute and chronic cases whilst acute cases attended Bellevue for both surgical and medical procedures. Cowl compared the death rates since the Charity hospital did not record the number of patients it cured. In 1876 the Homoeopathic (Ward) hospital took 3,077 patients whilst Charity took 3,621. Of these 187 Ward patients died compared to 699 Charity patients, these figures representing mortality rates 6.1% and 19.3% respectively. Cowl noted that patients were assigned to either hospital by an "old school" physician so that the lower mortality rate could not be explained by a better class of patient being sent to the homoeopathic hospital. Indeed, the reverse was the case since Charity received most of the "desirable" surgical and women's cases. Further, Ward received the majority of phthisis cases, seen to be notoriously difficult to cure. Whereas between 1876-7 only 30% of Charity's patients were phthisical 60% of Wards were suffering from this condition, raising the latter's mortality rate for that year. Cowl concluded that from the data available the Homoeopathic Hospital on Ward Island was more effective than any other institution in the area.

Further, homoeopathic expenditure was less for medicines and liquor, per capita and in total[134]. Charity spent $13,478 on medicines in 1878, Ward only $1612, the average expense per capita being 1.56% and 0.52% respectively. In total Ward spent $53,031 where Charity spent $133,506. Another difference was that whereas Charity could refer "lingering cases" to the Almshouse or the branch hospital on Randall's Island and Hart's Island, the homoeopathic hospital could only transfer a patient if the patient requested it, which they rarely did. Further, many cases of third stage phthisis were transferred from Charity to Ward, artificially increasing the latter's mortality rates. Similarly, David A Strickler compared allopathic and homoeopathic performances in measles, scarlet fever, typhoid, diphtheria, and obstetrics during 1894

[133] Cowl (1879)

[134] It is noteworthy that liquor is mentioned here, though the relative amounts used in therapeutics is not stated.

and 1895 from a dozen cities throughout the United States[135]. Whilst the author recognised that the reporting of infectious disease by physicians of either school could not be relied upon as wholly accurate, death certification could be relied upon since no body was allowed burial until the health officer had received a death certificate. Further, it was conceded that allopaths treated more patients than homoeopaths but when the statistics were modified accordingly homoeopathic performances were still "flattering". In 1894 the average mortality rate for allopaths in treating measles was 3.0 %, whilst homoeopaths experienced a mortality rate of 0.8%. Similarly, allopaths reported a 9.24% mortality rate for scarlet fever, whilst homoeopaths reported only 5.66%. Typhoid fever was less clear- cut with allopaths experiencing a high mortality rate of 38.15% and homoeopaths close behind with 36.54%. In Diphtheria allopaths were more effective with a mortality rate of only 33.47% compared to a homoeopathic one of 35.17%. Obstetrics represented another close call with allopaths reporting a rate of 1.93% and homoeopaths 1.13%. 1895 saw an improvement for homoeopaths with a mortality rate less than allopaths across all diseases. Taken over a five year period from 1890-5 homoeopaths experienced more therapeutic success overall[136].

Disease	Allopaths	Homoeopaths
Measles	3.99 %	0.8 %
Scarlet Fever	8.99%	5.0%
Typhoid Fever	22.56%	15.15%
Diphtheria	32.5%	27.95%
Obstetrics	2.09%	0.85%
Average	13.92%	9.95%

Figure 2 Mortality Rates for 1890-5 in Twelve US Cities in Five Diseases

Similarly, Charles Eaton demonstrated statistically the effectiveness of homoeopathic smallpox vaccination witnessed in the epidemic in America five years previously[137].

[135] Strickler (1898) The cities under consideration were Baltimore, Cincinnati, Detroit, St Paul, Providence, Denver, Indianapolis, Syracuse, Rochester, Nashville, and Seattle.

[136] The argument seems to have been that allopathic medicines were less effective than homoeopathic ones rather than actively deleterious. This represents a significant emphasis on the part of homoeopaths and as I explain in chapter four was one of homoeopathy's 'missing arguments'.

[137] Eaton (1908). Presented to the A.I.H. at their Jamestown meeting in the previous year. For a fuller discussion see the report of the A.I.H.Bureau of Sanitary Science and Public Health (1907) in Transactions of the A.I.H pp 331-583.

Eaton pointed out that Iowa, his hometown, presented an ideal test case since the District Courts had made three independent and distinct decisions protecting homoeopaths' rights to use their own product in vaccination against smallpox. The effectiveness of the oral administration of the product versus the hypodermic injection of it was also tested. The question was, not one of dose, but whether taking *variolinum* orally was an effective means of vaccination. Noting Koch's assertion, that tuberculosis could *not* be contracted through infected beef or dairy products, had been *disproved* by the findings of the British Royal Commission and clinical experience, Eaton claimed vaccination *was* effective by ingestion. The combined experience of Iowa homoeopaths, who were asked to report on those vaccinated, those known to have come into contact with the disease and those subsequently contracting the disease, showed that of 2,806 receiving the homoeopathic *variolinum* 547 were known to have come into contact with the disease with only 14 subsequently developing the disease[138]. Eaton further noted a marked reduction in the number experiencing septicaemia after homoeopathic vaccination compared to regular scarification, claiming morbific agents were rendered inert in the alimentary canal.

In the ensuing discussion Augustus Korndoerfer of Philadelphia related how, at the suggestion of Constantine Hering, he had analysed the saliva, lymph and pus of every smallpox patient he treated to test the reaction of the *sulphocyanogen* elements of the substances. Korndoefer found a marked diminution of reaction for the *sulphocyanogen* in those with small pox, especially those who had not been vaccinated, whilst those who had been vaccinated showed a much lesser reaction. Combined with the observation that silver metal workers never contracted smallpox, Kornhoefer concluded that the cyanides produced immunity against smallpox and could be used as a disinfectant to prevent infection. His own experiments in this regard showed that, where he had so disinfected a house, no second case of smallpox had ever occurred. Finally, Eaton recommended the use of *variolinum* in the event of smallpox being contracted. The low potencies (1st-6th decimal) were reported to take the disease to the vesicular stage and then abort it. Despite its apparent successes, however, Eaton believed the individual right of the physician to use *variolinum* or

[138] '*Variolinum*' is the contents of the ripened pustule of small pox.i.e. the "natural disease" It is not the contents of the *vaccine* pustule, which is *vaccinia*, and hence a product of the "artificial" disease. Neither is *variolinum* the small pox virus but the virus of variola itself, i.e. the virus within the body. AIH Transactions (1907) p 548

scarification should remain and the Institute should not endorse the exclusive use of *variolinum* to the secular authorities[139].

Homoeopaths Pioneer Control Groups, Placebos and the Double Blind Trial in Clinical Experimental Settings.

Coupled with the conviction that the homoeopathic materia medica needed reproving to augment homoeopaths knowledge of the pathological, physiological and bio-chemical action of drugs on the human organism, was a concrete effort to remove error from homoeopathic drug trials. Whilst this 19th century homoeopathic project is dealt with in detail in the next chapter, it is worthy of note that, during this re-proving Conrad Wesselhoeft, an 1856 graduate of Harvard Medical College and Homoeopathic Professor of Materia Medica at the University of Boston, instituted both the control group and the placebo in his reproving of *carbo vegetablis*. Wesselhoeft insisted that experimental subjects should record their symptoms when taking only placebo, *sac lac*, for a period of six weeks. Thereafter, they should take dilute preparations of *carbo* and note the symptoms produced. In this way Wesselhoeft aimed to distinguish between the effects of the drug and the effects of the experimenter.

This homoeopathic innovation, however, is generally disregarded by history. Austin Bradford- Hill is considered by mainstream historians to have been the first to instigate the control group in 1947 [140]. Wesselhoeft's experiments were conducted in 1877 but did not lead to a favourable outcome for homoeopathy. The negative outcome of the trials led him to conduct microscopical investigations into the triturated drug to determine the presence of *carbo* particles. Two years later in 1879 homoeopaths conducted a double blind experiment which came to be known as the "Milwaukee Test". Sponsored by the Milwaukee Academy of Medicine, using a series of commonly used homoeopathic remedies determined in advance, and using patients suffering from chronic disease, the homoeopathic physician selected the appropriate remedy for each patient. Meanwhile the vials containing the

[139] For more on homoeopaths and vaccination at the turn of the 20th century see Davidovitch (2004) (a)
[140] See Dearborn (1955), Kaptchuk (1998) and Davidovitch (b) for homoeopathy being the first to bring in controls and placebos into experimental pharmacology. See Le Fanu (1999) for an account of the experiments of Austin Bradford –Hill.

homoeopathic remedies were cross-matched with identical looking vials containing placebo. Administering active ingredient/placebo at random, the homoeopath then had to decide on the basis of the patient's reaction which of the two vials in his opinion contained the active homoeopathic remedy. As Ted Kaptchuk concludes, this trial represents the first double blind clinical trial in the history of blind assessment[141]. As Lewis Sherman noted at the time "The most important feature of this test is the removal of all bias from the minds of the experimenters"[142]. It also represented a departure from Wesselhoeft's earlier trial, which was a proving, and came closer to the randomised controlled trial of the present, in so far as the trial was conducted on *diseased* subjects and not healthy ones. Unfortunately the trial encountered recruitment problems and the results were inconclusive.

Conclusion

Homoeopathy was part of 19th century science for three reasons. First, as Victor Hallman noted as Chairman of the A.I.H.'s Bureau of Materia Medica in 1907, many scientific developments had vindicated homoeopathy. He claimed; "Recent investigations and developments in cell life and its elective affinity; the almost unlimited divisibility of matter, and increased chemical activity of substances in proportion to the degree of divisibility; radioactivity, the opsonic theory etc in fact all recent scientific developments in this field tend to harmonize with the system formulated by and embodied in the Organon of Samuel Hahnemann, one hundred years ago "[143]. Thus it was not the case that homoeopathy could not be explained. Rather, it *was* the case that homoeopaths could not get their explanations accepted. Secondly, the impact of homoeopathy upon allopathy had been profound. Homoeopaths had introduced new drugs into medicine, such as *nitro glycerine* and medical technologies, such as the portable sphygmograph. That much of this has been lost to history is due to homoeopaths' exclusion from many of the principal medical journals of the time and to subsequent Whig history[144]. Indeed, I will argue later in the thesis that the medical Law of Similia and the principle of the minimum dose laid the

[141] Kaptchuk (1998)
[142] Sherman (1879) p 237
[143] Hallmann (1907)p 232
[144]Indeed, the B.H.S. noted at the end of the 19th century that the journal 'The Practitioner' was now taking homoeopathic contributions.

groundwork in the collective medical consciousness for bacteriology's eventual acceptance by allopathic medical practitioners. Thirdly, in an attempt to place homoeopathic epistemology upon a scientific footing, homoeopaths introduced two new forms of investigation in the 1870s- the *controlled clinical trial* and the *microscopic investigation* of dilutions. These epistemological developments added to the already enormous amount of homoeopathic medical data, which compounded the problem of handling experimental and investigative error. This failure I believe contributed significantly to homoeopathy's downfall and is the subject of the next chapter.

Chapter Three

Taming the Beast: How Homoeopaths and Allopaths Handled Error in the last Quarter of the 19th Century in Britain and America.

It has been suggested that what separates "scientific" disciplines from "non scientific" disciplines, or, "hard" sciences from "soft" sciences, is the perception of cumulativeness within the discipline[1]. This perception, in turn, rests upon that discipline's ability to handle (that is, dispose of) error. It has also been suggested that this latter ability is related to the social arrangement inhabited by a group of enquirers[2]. In this chapter I will combine these ideas to show how homoeopaths at the end of the 19th century, especially those in the United States, failed to negotiate error effectively and thus undermined the potential cumulativeness of their knowledge base. On the other hand, allopaths, I will argue, succeeded in negotiating error and, even in the face of u-turns in medical practice, maintained a rhetoric of cumulativeness in their knowledge base. This allopathic manoeuvre was facilitated by an absence of an experimental culture at this time. These differences in the negotiation of error between allopaths and homoeopaths were related to two factors: the social organisation of each group of physicians and the role of theory in their epistemology. In this chapter I hypothesise which forms of social arrangement homoeopaths and allopaths may be found to have inhabited on the basis of the way they handled error, but that this requires further research. Also, I argue differences in the role of theory in their respective epistemologies made a significant contribution to allopathy's durability and homoeopathy's loss of scientific status and eventual marginalisation.

Theoretical Backdrop-Monsters and Hard Science

In his fascinating paper "Polyhedra and the Abominations of Leviticus" David Bloor synthesises the history of mathematics narrative of Imre Lakatos in "Proofs and Refutations" with the grid/group typology of Mary Douglas elaborated in "Natural

[1] Hedges (1987)
[2] Bloor (1978)

Symbols" [3]. Bloor's aim is to demonstrate "[...] the connexion between social processes and the style and content of mathematical knowledge", justifying his marriage of the theories of Lakatos and Douglas on the basis of their common theme; namely, how people respond to things which do not correspond to the "boxes and boundaries" of their accepted way of thinking[4]. Of particular interest to the present thesis is Bloor's contention that Douglas' theory, which links cognitive responses to social structure, "[...] means *we should be able to predict the social circumstances* which lie behind the different responses which mathematicians make to the troubles in their proofs"[5](italics added). Likewise, Douglas claims "The theory predicts or explains which intellectual strategies are useful for survival in a particular pattern of social relations, and facing the other way, it indicates which kinds of cosmology and theoretical style"[6]. How is Bloor able to make such a predictive claim? Is it valid to translate Douglas' heuristic into this kind of hypothetico-deductive model?

I argue here that it is. Or rather, I argue that I am able to predict what social forms would most likely be found among homoeopaths and allopaths in the U.S. and U.K. upon further investigation into their respective grid/group composition. Still, this preliminary prediction can be made for two reasons. First, the structuralism inherent in Douglas' and Bloor's, and less obviously in Lakatos', thinking implies at least a weak determinism between social structure and knowledge, so that *any* social form *cannot* be associated with *any* knowledge form. Put another way social and knowledge forms possess certain elective affinities. I will consider each of these authors in turn to demonstrate this. Secondly and relatedly, I will suggest operationalisation of Douglas' typology has occurred in a sufficient variety of contexts to afford empirical substance to the existence of such a relationship.

In justifying such causal connections Lakatos' provenance is particularly interesting. Bloor notes that Lakatos denies Platonic Essences or Forms, claiming the history of mathematics reveals the stretching of concepts and the multiplication of classifications in order to incorporate apparent counter examples to proofs. Lakatos' conclusion is that as human creations an *indefinitely large number* of boundaries exist

[3] Bloor (1978), Lakatos (1976) Douglas (1973).
[4] Bloor (1978) p 245.
[5] Bloor (1978) p 245.
[6] Douglas (1982) p 7.

that we may reasonably draw around our knowledge even when we begin with simple principles of classification, since these do not remain simple for long. Likewise the conferring of "counterexample" status upon a phenomenon is a social achievement, a role placed upon something by the context of its use, not something determined by an external reality. Alluding particularly to Euler's theorem on polyhedra, Bloor claims Lakatos shows constraints to the continual process of concept stretching and boundary drawing are historically susceptible to pragmatic considerations or have served specific interests. Thus, even in mathematics, definitions and boundaries, proofs and counter examples, are not fixed and stable as ontological necessities but are the product of negotiation and compromise. Lakatos' perspective here was no doubt reinforced by his Second World War experiences[7]. Like Kuhn and Feyerabend, Lakatos witnessed first hand the manipulation of physics, one of the purist forms of enquiry, by the vicissitudes of war and the goals of big science. Further, Lakatos' Popperian discipleship explains his concern with falsificationism but he goes beyond Popper in his suggestion that a conjecture once falsified, is not simply removed (as per Popper's expectation), but adjusted to facilitate the incorporation of error[8]. It is a social rather than a purely cognitive exercise.

Yet Lakatos is no constructionist in the way that Bloor is. As a student of Gyorgy Lukacs, Lakatos was exposed to the Hegelian dialecticism inherent in Marx, which had been "written out" by the "scientific materialist" supporters of Lenin's Communism. Indeed, Lakatos agreed with Hegel that, "History is philosophy teaching by examples", the former displaying a true Tory provenance in placing the normative history in the main text of his narrative, whilst the actual history was relegated to the footnotes [9]. One wonders to what extent the synthetic and essentialist aspects of Hegel's thought influenced Lakatos. Bloor is, by contrast, writing from within the heart of the Strong Programme in sociology, a programme committed to discerning the sociological determinants of knowledge *content* (rather than just the timing or

[7] Fuller (2002) pp 395-6.

[8] Indeed, according to Steve Fuller Lakatos considered himself Popper's natural successor to the chair in the Logic and Methodology of the Social Sciences at the London School of Economics in the mid 1960s. The similar titles of their respective theses are not without significance either; Popper's opus was entitled 'The Logic of Scientific Discovery' whilst Lakato's Ph.D. bore the subtitle" The Logic of Mathematical Discovery".

[9] Though attributed to Hegel this truism was apparently first uttered by Viscount Henry Bolingbroke, part of the Tory opposition to Britain's first parliamentary based Whig government. See Fuller (2002) pp 397-398.

location of the appearance of that knowledge). As Ian Hacking has put it, Bloor's assertion is that "[...] social location on the group/grid chart affects relations to border-line cases, and hence affects our taxonomies and classifications in terms of which knowledge grows"[10]. Taxonomies are neither determined by past classifications nor the way the world is, but in a nominalistic fashion, so that each grows in relation to the other providing a kind of "fit". This process is neither pre- ordained or random, but a "causal story" in terms of "social need", an idea also inherited from Douglas.

As for Douglas, she is writing from within a long anthropological and Durkheimian tradition concerned with the means by which social groups give intellectual coherence to the natural world. For example, how patterns of domestic life mould a group's wider scheme of classification so that Nature is used to legitimate social institutions. The natural world is mapped onto the social world. Likewise social arrangements can serve as models for social groups in attempting to grasp the physical or metaphysical order of things. But there does not exist an infinite variety of configurations. Certain knowledge forms will always be associated with certain social forms. As Douglas puts it "[...] the number of cultural packages among which people choose when they settle for any particular kind of social environment is limited"[11].

Returning to Lakatos, his original conclusion was that differential responses to error in the history of mathematics have individualistic, cognitive causes, whilst the lack of dialecticism in informal mathematics before 1840, brought about in the 19th century with Seidel's conception of "universal convergence", was a consequence of mathematicians simply using the wrong methodology[12]. Bloor modifies this conclusion claiming that the handling of proofs within mathematics was related to wider social processes occurring in Prussia in the first half of the 19th century and that these societal changes, not cognitive or methodological factors, explain the appearance of the dialectical system of proofs and refutations in mathematics in 1840.

[10] Hacking (1984) p 473.
[11] Douglas (1982) p 7
[12] Lakatos' use of classroom mythical characters debating the theorem has the disadvantage of making their respective positions appear the product of merely intellectual preference rather than social position.

Using R.S. Turner's studies of the growth of professorial research in Prussia Bloor concludes that the transformation of the Prussian university system under Napoleon after 1806 to meet the educational and bureaucratic needs of the new regime introduced a new spirit of competitive individualism into the university. From a closed, collegiate system in the late 18th century, with internal appointments to chairs assuring group loyalty, university appointments under Napoleon became centralised in government hands. Bureaucrats needed standards they could both understand and manipulate. Disciplinary accomplishments thus became the new criteria for appointments with administrators assessing applicants' publications and consulting fellow practitioners throughout Europe. Not so much innovation but esoteric scholarship and grand synthesis represented the intellectual aspirations of the new regime. More prosaically, the regime hoped to provide competent schoolteachers and bureaucrats, "[...] loyal men of culture and moral probity" that would ensure the Empire's longevity[13].

In the event, the shift in the Prussian educational system after 1840 represented an unintended consequence. From harmonious accumulation and organic synthesis Prussian universities came to be characterised by specialisation having to compete now for students, for professors, for intellectual reputation. Rather than promoting a sense of the organic unity of knowledge, the universities, labouring under the bureaucratic imperatives of research and discovery, came to critique their knowledge systems dialectically. The drive for discovery outweighed traditional static group loyalties and the philosophical systems that symbolised them, producing just the environment for a dialectical approach of proofs and counter examples to emerge. Thus Bloor concludes the assigning of "error" to a conjecture or proof is always a contingent and social, not merely logical and cognitive, act and that social arrangement *circumscribes* what is intellectually possible. Of note is the fact that Bloor moves *from* the intellectual *to* the social in his analysis.

As well as the structuralism inherent in the thinking of the above authors, empirical investigations using Douglas' model give consistent affirmation of the model's

[13] Bloor (1978) p 263. .

reliability (refinements notwithstanding)[14]. There appear to date to have been two broad, overlapping empirical uses of Douglas' model: locating social groups within a discipline on the basis of variations within the discipline's knowledge base, and locating a social group within the wider society on the basis of its knowledge base.

Combining both of these approaches George Kelly has applied Douglas grid / group model to 18th century French Enlightenment thought and particularly to the activities of the "gens de letters"[15]. At the outset he suggests Enlightenment thought was the product of those in a low grid, low group position due to its rampant individualism and utilitarianism as well as the critical historiography of Voltaire and Montesquieu. Also, Enlightenment intellectuals were scattered, and represented a complex mixture of social strata, but were frequently patronised by the privileged and felt a strong intellectual solidarity with their own kind. This, Kelly claims, justifies considering them a group

From within the literary arm of the newly restored critical historiography associated with Enlightenment thought the academic eulogy became prominent, epitomising the new individualism and becoming a surrogate for the Christian "exemplum" and "imitato", a characteristic of a high grid, high group social form. However, the most powerful and articulate elements of this intellectual movement inhabited cosmologies on the high grid/high group axis, and were represented primarily by the "Grand Siecle". The high grid/high group element within Enlightenment philosophy Kelly explains in terms of the social habits of its votaries i.e. ascriptiveness, sense of hierarchies, royal and aristocratic patronage and by the conviction that philosophy could rebalance a fragile 18th century cosmology without sacrificing its culture Thus both low and high grid and group juxtaposed each other, along what David Ostrander has called the "stable diagonal", often a catalyst of social change (see Fig. II)[16]. Kelly suggests therefore that not only did these philosophers mediate this secular change but they did so along the low grid/low group, high grid/high group (or C / A) axis, with a short stopover in a low grid/high group state (factionalism – Jacobinism in this case).

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[14] I am very gratefully indebted to Andrew Wear of UCL and Malcolm Nicholson of the University of Glasgow for their advice regarding the predictive capacity of Douglas' typology and in providing a further Douglas reference.
[15] Kelly (1982)
[16] Douglas (1982) p 8.

Like Bloor, Kelly analyses cognitive style first and then seeks out social position, the latter taking secondary place in his account. Even then, as he admits, his social history is thin since the focus of his attention is primarily on intellectual history.

Martin Rudwick applies Douglas heuristic to science in the first of the two types of application mentioned above. Rudwick claims, "It [Douglas' model] suggests features of both cosmologies and social environments that may be expected to be found in conjunction with each other"[17]. Analysing early 19th century geology Rudwick shows how there have been fairly consistently present within geology four variants in cognitive style: abstract, concrete, agnostic and binary. Abstract corresponds to the dialectical method searching for causes and underlying principles and laws. Concrete is a more pragmatic classificatory style whose goal is classification. Agnostic is sceptical of the possibility of synthesis and binary divides geological events into those before and after a great moment.

The Abstract cognitive form Rudwick associates with low grid and low group and thus would be found among competitive individualists. These he finds in the "Big Men of Geology", those who build careers in science through the securing of a reputation based upon the quantity and quality of their publications. Charles Lyell, James Hutton, and later, Charles Darwin, typify this style. Concrete, as high grid and high group should correspond, Rudwick points out, to those geologists recognising ascribed hierarchy and indeed he finds them in the geological societies and voluntary organisations of the discipline. Concrete thinkers build networks for the benefit of the group and respect those of longer experience. Their geology is highly historical. Such geologists he finds concentrated in mining and scientific schools and universities, these representing the bulk of mainstream geologists. The concrete cognitive style is found especially in the work of Abraham Werner in the late 18th century and William Buckland in the early 19th century together with scientists such as Alexander von Humboldt and William Whewell. Abstract and concrete thinkers represent the stable diagonal here and the site of most innovation in the field. The profession is the primary locus of the concrete style. I will argue there was such a group of theorists

[17] Douglas (1982) p 219.

within the A .I. H., who were attempting to work for the good of the homoeopathic profession rather than individual practitioners.

Agnostics, as high grid and low group, would be expected to display an "atomised subordination". Involving social insulation and exclusion, this cognitive style has never produced an enduring tradition in geology Rudwick claims. George Greenough, first president of the first geological society and Henry de la Beche, first director of one of the first state geological surveys, represent such marginalized thinkers. Greenough particularly was one who practised at the extreme end of empiricism and subsequently became accused of engaging in "[...] uninterpreted fact collecting"[18]. A rational sense of history is lacking in this grid/group position. Finally, Binary thinking, as low grid/high group, would give rise to factions. Classical geology produced diluvialists and "scriptural geologists", their modern day counterparts being Creationists[19]. Both interpreted the data to fit Genesis and were resistant to innovation. Small and unstable, these groups act defensively against the threat of mainstream scientists. Along with the agnostics they represent what Rudwick calls the "unstable diagonal" (B/D) whilst all groups have contributed to geological thought at one time or another[20].

Dennis Owen uses the Douglas model in the second approach mentioned above when he (re) analyses the witchcraft trials of Salem in 1692[21]. Owen asks why, during the trials, empirical evidence was considered secondary to "spectral" evidence, eye-witness accounts of a ghost like double of the accused witch. Victims of the witches claimed they had been variously attacked by spectres, kicked, pinched, bitten scratched or forced to write in "the Devils Book". Like other authors in the Douglas volume, Owen proceeds from the realm of ideas to the social claiming "[...] the spectral evidence witnessed at the witchcraft trials represented in dramatic form significant underlying theological, ecclesiastical, political and social conditions in the colony as a whole and in Salem village which came to fruition in 1692"[22]. Indeed, the witchcraft trials make sense when one considers the sense of violation and

[18] Douglas (1982) p 235.
[19] Douglas (1982) p. 229.
[20] Douglas (1982) p 235.
[21] Owen (1982)
[22] Owen (1982) p 281.

degeneration the village, and particularly the large and central family of John Putnam Jnr., from which Owen claims most of the accusations emerged, had suffered. Not only were some inhabitants of the village affiliated to outside forces, notably to churches and the town, but the village itself, being in the East, had become increasingly isolated from important economic markets and pressure on their bounded land with fourth generation families setting up independently. Added to this loss of wealth was the loss of political autonomy of the State of Massachusetts as well as the localised autonomy of the village. Social experience, classification categories (e.g. good and evil) and behavioural norms became ambiguous, confused and riddled with anxiety so dissenters were sought on the inside of the Puritan community. Patterns of insiders and outsiders, attackers and defenders, emerged with their low grid internal make up indicating they lacked the internal resources to resolve internal conflicts and reinforce group identity and boundaries effectively.

The monster barring nature of the witch trials were mediated through the Puritan conception of sin and its associate notion of "all one in the body of Christ". Owen notes that dissent by one was seen as capable of corrupting the whole Christian community (body) so such dissenters were expelled. The social body of Salem came to be seen as having similar patterns to the figure of the witch, with her normal exterior but degenerate interior. In accusing and eliminating witches, Salem found a language for its experience and a way of stripping away the normal, revealing the evil and eliminating it from both the human and social body. It also explains the primacy of spectral evidence in the trials since such allowed a solution to the complex problem of stripping away apparent normalcy. Moreover, the conflict was moral rather than political. It was not about who would rule the village, but about what character the village should take. Thus is Owen able to place the witchcraft trials in the context of a low grid, high group social form, one imposed upon the inhabitants of Salem by external political and internal economic changes. Later in the thesis it will become apparent that allopaths possessed a similar social form and saw homoeopathy as a "witch like" violation of medicine.

Finally, and perhaps most interestingly from the point of view of this thesis, George Gaskell and James Hampton, without any empirical application, suggest how the

grid/group theory may be operationalised in the context of accounting styles[23]. Gaskell and Hampton claim the challenge for grid /group theory is that "[...] an empirical evaluation will require detailed predictions to be made for a specific situation including the operationalising of the concepts of social contexts and cosmology in a new setting"[24]. Basically, they argue that different social contexts will give rise to different styles of accounting. Specifically, they claim that in a low grid setting, for example, uncertainty would be revealed in budgeting information as well as probabilities in best and worst case scenarios. In a high grid setting however, uncertainty would not be revealed in budgeting, methods would be fixed not flexible, in an attempt to produce accurate forecasts.

I will adopt a similar approach to Gaskell and Hampton, but in reverse, in what follows. Instead of predicting knowledge styles from social position I will suggest possible social position on the basis of knowledge style. Whilst what follows is suggestive rather than definitive, it offers clues to what may be discovered with further empirical data that is unavailable to me at present. I will look at the responses to error in the four principal national medical societies existing in the U.S. and U.K. in the late 19th century; American homoeopathy within the A.I.H. American allopathy within the A.M.A., British homoeopathy within the B.H.S. and British allopathy within the B.M.A[25]. I will show how each group of physicians used a combination of "monster barring", "exception barring" and "monster adjustment" responses, but no dialecticism, so that medical knowledge was a product of the negotiation of error. The responses of American homoeopaths in particular precluded cumulativeness and any interpretive agreement and in this sense it can be said that allopaths handled error more effectively than homoeopaths. I suggest that the differential responses to error by homoeopaths and allopaths indicate variations within their internal social arrangements and possibly their social position in the wider society, though this requires more research. I conclude the lesson of history is the essential and stabilising nature of theory in medicine knowledge.

[23] Gaskell and Hampton (1982)
[24] Gaskell and Hampton (1982) p 103.
[25] See p47 for definitions

The Four Responses to Error

Bloor notes there are four types of response to error. First, "monster barring", a term coined by Lakatos, represents the most straightforward response and represents *exclusion.* Error is simply deemed monstrous, a pathological case, an "evil" that must be kept outside so as not to corrupt the "good" on the inside of the group. The good/evil knowledge binary reflects the social dichotomy of those in the group versus everyone else; insiders/outsiders, us/other or whatever form it may take. Such groups are usually small, internally divided and subject to outside threat, often suffering repeated schisms. As such they need to exercise and symbolize high group control. This group is thus "high group", possessing a strong group boundary insulating it from other groups and "strangers". Internal boundaries, roles and statuses are conceived in this typology as an internal grid. The group subject to such monster barring strategies would have flexible internal boundaries and would thus be "low grid".

A second response to error comes in the form of what Lakatos calls "monster adjustment" and "exception barring". Here the error is not seen as a pathological case or an alien form but becomes accommodated into the existing epistemological framework. Monster adjustment means the error is not seen as a monster after all but as a different, initially unrecognisable, incarnation of the real thing[26]. Exception barring allows the accommodation of diversity by means of the creation of more subdivisions. In this instance a counter example would be allowed, not to disprove the theorem, but to restrict its authority. Its scope of application would be narrowed whilst its veracity would remain intact. The social group associated with these two responses would be high grid and high group. Thus group boundaries separating the group from the outside world would be strong whilst roles and statuses within the group would be fixed and graded, with rights and duties being clearly demarcated[27].

[26] For Lakatos' mathematicians this centred round the question of when a polyhedron was not a polyhedron but some other form. So, Matthiesen, one of Lakatos' protagonists defending Euler's theorem, was able to claim "that the polyhedron has hidden faces and edges, which if counted, leave the theorem [....] untarnished even for these seemingly recalcitrant cases."[26]

[27] An army or bureaucracy is high grid, being static, diversified and continuity preserving

A third response Bloor calls "primitive exception barring". Here the theorem and counterexample peacefully coexist, with no attempt at synthesis. Such a group would be high grid, low group. Insulating boundaries would be high so little formal group pressure would exist, the peaceful coexistence reflecting a dichotomised social arrangement demarcated by institutional boundaries.

Finally, there exists the low grid, low group response to error, of "refutation" or "falsification". In this group social pressure would not be reduced but would change form, perhaps from formal to informal pressure from society. The point is that social pressure would still exist. This dialectical method of "proofs and refutations" exerting pressure upon group members to innovation and novelty, encouraging cross-referencing between classificatory schemes thereby dissolving conceptual boundaries. This group, where mistakes are tolerated and risks taken, would be pluralistic, individualistic, competitive and pragmatic. Here, reward goes to those inventing new perspectives rather than those preserving tradition, so that the knowledge base of the group would be as universal or general as the social form would be competitive.

These four possible responses to error and the social forms associated with them are represented in the table below.

B Grid C

High Grid Low Group	*Simple co- existence of theorem and counter-example*	High Grid High Group	*Monster adjustment and exception barring*
Low Grid Low Group	*Dialectical method of proofs and Refutations*	Low Grid High Group	*Monster barring*

A Group D

Figure 3 Grid /Group Configurations, Social Forms and Error Responses.

The Appearance of Medical Monsters – Why the 1870s was a Crisis Period in Medicine?

The homoeopathic conjectures of "like cures like", the solubility of insoluble substances by trituration and the minimum or highly dilute dose became particularly vulnerable during the 1870s, the last two being openly contested within homoeopathic ranks. As Bloor notes, once a proof procedure is generated (in this case the homoeopathic methodology of provings on healthy people) the original conjecture(s) become vulnerable to both local and global counter examples. Local counter examples arise in relation to the proof procedure whereas global counter examples contest the original conjecture(s). American homoeopathy inhabited a highly empiricist, experimental culture at this time and thus became vulnerable to both local and global counter examples, that is, to the method of proving drugs being contested and to the original three conjectures of similia, trituration and dilution being overthrown. Throughout this decade, homoeopaths attempted to accommodate these errors into their existing body of knowledge. As will be shown their relative lack of success in doing this, particularly in the United States, was both socially underwritten and epistemologically devastating.

The context of medicine in the 1870s provides us with part of the explanation as to why errors were perceived in medicine generally at this time, and homoeopathy in particular, and why they took the form they did. Allopathic medicine had undergone major changes during the first half of the 19th century[28]. The 1870s saw Pasteur and Koch "discover" many invisible yet active agents with the microscope claimed to be the etiological agents of many infectious diseases. Some homoeopaths correspondingly attempted to "discover" the invisible yet active agents in dilute drugs that restored a person to health.

Furthermore, anxieties relating to fraud and deception had become deeply rooted in American culture. Historians have noted how Americans became cynical about the "confidence man" and the "painted woman" and these anxieties became grafted onto

[28] Warner (1997)

the assault on medical systems, playing on homoeopathic insecurities.[29]Allopaths attempted to label homoeopaths as "quacks", claiming their remedies contained nothing of therapeutic value and that they were conning an unsuspecting public, fostered homoeopathic self -doubt. One allopathic physician wrote in 1835;

"Were it possible to prove incontrovertibly that one single case has ever been cured by, and not merely after, the 30th developed virtue of any substance or drug, no apology whatever could ever be devised for the medical profession if it should hesitate forthwith to adopt homoeopathia [...]"[30].

Hahnemann was accused of having made pretensions to science, being an empiricist by choice and hence a "charlatan". S. R. Gross M.D. derided homoeopathy along with mesmerism, Thompsonianism and Perkins tractor as 19th century incarnations of 16th century witchcraft, such "spiritism" and "fanaticism" holding many still in bondage, he claimed[31]. Of course such monster barring allopathic moves were partly an attempt to shore up allopathy's own credibility in the face of increasing rivalry. More importantly, it left homoeopaths with the burden of proof.

Accordingly, the A.I.H. in 1877 stated, "Each physician may individually be assured of the genuineness of his results in regard to provings as well as of cures; but we should place ourselves in a position to demonstrate facts to others, and never expect them to believe what we cannot prove or what is open to many valid objections"[32]. Likewise, S.R. Beckwith, a homoeopathic surgeon from Cincinnati, cautioned "I believe we cure our patients, and I can multiply testimony to that effect; but here is a whole army of men who deny the cures"[33]. The epistemic investigations of homoeopaths at this time can thus be seen in part as an attempt to distinguish their own remedies from quacks, patent remedies and other "fraudulent" medical sources, and in part as a response to allopathic criticism. These investigations took two forms- experimental provings and microscopic analysis of attenuated medicines.

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[29] Warner (1998) p 13
[30] Coulter (1982) p 169
[31] Transactions of the American Medical Association (TAMA) (1874) p155
[32] Transactions of the American Institute of Homoeopathy (TAIH) (1877) p 99
[33] TAIH (1877) p 261.

The Response of American Homoeopaths to Epistemological (Internal) Error.

This twin approach was aimed at eliminating a single source of error- that of the homoeopathic materia medica. Since Hahnemann's day many old remedies had been re-proved by homoeopaths and new drugs introduced but this had led to a burgeoning literature with over- long repertories. Often a single drug had over 1,500 symptoms associated with it and sometimes these symptoms appeared contradictory. As well as multitudinous and contradictory symptoms, homoeopaths began to express concerns that, whilst their remedies often cured, there were a significant number of occasions when the apparent similimum failed to bring a satisfactory result. In 1873 J. P. Dake of Nashville, Tennessee called for a National College of Drug Provers to be instituted "[...] embracing a competent faculty and corps of provers, twenty or twenty-five in number, some male and some female well selected and well qualified in the art of observing, supplied with all the needed diagnostic means and apparatus"[34]. The following year American homoeopaths acknowledged openly the intrusion of error into the materia medica and in 1875 Dake put his proposal to the A.I.H. claiming; "How to detect and avoid the errors of drug pathogenesis is today the question of all questions"[35] and "[...] all engaged in practice have seen enough homoeopathic non cures to convince them that perfection in drug pathogenesy is not yet reached"[36]. Not all agreed. Samuel Lilienthal of New York favoured the verification of drug action at the bedside. Still others suggested textual analysis was all that was necessary to eliminate contradiction.

These responses constituted "monster adjustment" and "exception barring" strategies, associated with high grid/high group social forms that tend to be stable and continuity preserving. Evidence that the A.I.H .was possibly of this nature can be found in the Institute's resistance to Dake's "college plan", where provings of drugs would be removed from the hands of general practitioners and transferred to homoeopathic research institutions, and with the lack of turnover of personnel within the Institute's authority structure[37]. Conrad Wesselhoeft, for example, remained a prominent

[34] TAIH 27th session (1875) A college of Drug Provers for the Cultivation of the Materia Medica pp 734-741 Quote from pp 736-7
[35] TAIH (1875) p 735.
[36] TAIH (1875) p 736.
[37] TAIH 27th session (1875)

member of and contributor to the A.I.H.'s Bureau of Materia Medica from 1868 to 1901, being Chairman of that bureau for much of that time. Wesselhoeft basically dominated provings within the Institute for the last quarter of the 19th century. Thus the A.I.H. appears to have possessed the high internal boundaries and fixed roles of a stable group, possibly lacking the internal competition necessary for the purging of error, but this requires further research. The high group boundary was, no doubt, socially constructed partly through the antagonism and exclusionary tactics directed at homoeopaths by allopaths, and partly as the result of homoeopaths practicing their own exclusionary tactics to raise their professional profile, being both the victims and perpetrators of exclusion.

Conversely, a high group/low grid social form would have been required to foster the verificationist idea since it would have entailed the relaxing of internal boundaries and gradings as verificationism had the potential to make "all homoeopaths equal" from an epistemological standpoint. In the event, homoeopaths simply re-proved a few remedies within *their existing institutional arrangements* and through "provers clubs" in extant homoeopathic medical schools and no progress was made..

There was however, a further reason why the proving and re-proving of drugs waned in homoeopathic circles. Conrad Wesselhoeft's experiment of 1887 to re-prove *carbo vegetabilis,* with a counter test of placebo given to subjects to distinguish between experimenter and drug effects, was particularly disastrous. The experiment showed that the drug was able to elicit only 17 symptoms in provers, as opposed to the placebo (administered in advance of the trials to experimental subjects), which elicited 919 symptoms. Wesselhoeft concluded that triturated *carbo veg.*, one of homoeopathy's most trusted and widely used remedies, was inert. He then began a series of microscopical investigations to determine whether there were any drug particles within the various low dilutions of *carbo veg,* which could account for the failed experiment. Wesselhoeft concluded that drug particles were not further diminished in size by trituration, or grinding, as Hahnemann had claimed, and that often no particles existed beyond the third dilution of the substance so that their presence in anything beyond the fifth was purely accidental.

What Did the Response of Homoeopaths in America Mean? What was its effect?

What began as a drive to remove errors from the homoeopathic materia medica metamorphosed after Wesselhoeft's experiments with *carbo veg* and microscopical analyses into an unresolved debate regarding the effectiveness of high dilutions Rather than *discounting* what amounted to two failed provings of *carbo veg* the Institute attempted to explain and incorporate these findings. The result was disastrous for homoeopathic epistemology as American homoeopaths lost confidence in their principal methodology, and provings, previously the cornerstone of homoeopathic practice, became marginalized and replaced with a bureau of "General Therapeutics", a committee on drug provings and provers clubs. The proving college idea was dropped for almost thirty years. What had begun as an attempt to eliminate negative data thus led to a lack of consensus over what *counted* as evidence It was this disagreement over epistemology that I believe led to the formation of the breakaway International Hahnemannian Institute (I.H.A) in 1880 and *not* the debate over the efficacy of high and low dilutions *per se.*

B Grid C

	Reverse/Diverse Action of Drugs Standardise Methodology Broaden Subject Base Note if Proving Substance is Trituration or Solution Idiosyncrasy of the Patient Grouping of Symptoms-(textual analysis)
College of Provers	Single Provings Should be Excluded

A Group D

Fig 4 The Range of American Homoeopathic Responses to the Perception of Error in the Materia Medica in the 1870s

The Response to Epistemological Error by Homoeopaths in Britain

Like their American counterparts, homoeopaths in Britain considered the subject of drug provings. Through the pages of the Monthly Homoeopathic Review (M.H.R.) of 1879 British homoeopaths acknowledged the legacy of Hahnemann in providing clear guidelines for the conducting of provings, which it considered infinitely superior to experiments on animals. The M.H.R. considered that "[...] the number and variety of symptoms stated by Hahnemann to be the effect of one drug alone are absolutely perplexing"[38]. Constantine Hering (1800-1880), having authority as probably the last living student of Hahnemann, is cited as having assured the profession as to the "sceptical manner" in which Hahnemann collected his observations[39]. Nevertheless, the Review admitted that, as well as collecting observations from provings, Hahnemann had collected symptoms from poisonings or accidental over-dosings, noting these in his "Materia Medica Pura" as "observations of others". That Hahnemann's;

"[...] accuracy was not absolute and his inferences not uniformly sound, [it] has been proved by the labours of Dr Richard Hughes, who has been through the whole, we believe of these *Observations of Others*, and has traced all, or nearly all, to their original sources. Several important and valuable corrections have resulted from Dr Hughes' study [...]"[40].

Such corrections were about to appear in Hughes' "Encyclopaedia of Materia Medica" published by Dr Allen of New York "[...] the symptoms themselves, thus illuminated to their utmost, are also corrected or bracketed as dubious wherever required"[41]. Further, Hughes, the Review noted, had recently published three lectures assuring homoeopaths of the reliability of the source of Hahnemann's voluminous provings[42]. Indeed, Hughes credited Hahnemann with laying down the criteria that provers should be in good health, the very thing American homoeopaths were calling

[38] Monthly Homoeopathic Review April 1st (1879) pp 193- 202 Alfred C Pope M.D. and D. Dyce Brown M.A. M.D (eds).
[39] Pope and Brown (1879) p 196
[40] Pope and Brown (1879) p 197
[41] Pope and Brown (1879) p 198
[42] Pope and Brown (1879) p.198

for in their college of provers, and the Review credited American homoeopaths in aiding this work through their own experiments and investigations into poisonings.

Thus, error within the materia medica was *limited* by British homoeopaths to the accidental poisonings included by Hahnemann, which were incidental to provings anyway, and to the arrangement of the materia medica [43]. The Review recognised " [...] that a fundamental error was committed by Hahnemann when he contented himself with publishing merely a list of symptoms, separating them from their connection one with another, [and] is much to be regretted"[44]. This explanation, rather than provers imaginations or over-sensitivity to certain drugs, was used to account for the "large array of symptoms". It was admitted that, "[...] we often find the same symptom frequently repeated in different words, each being numbered as though it were a different symptom or indication of another form of disturbed health"[45]. Revealing a preference for the more Rationalist approach of textual analysis over experimental re-proving the Review claimed, "[...] we think a little study and reflection will soon disperse the cloud thus raised"[46].

Those symptoms considered by some physicians to be "fanciful" and "unworthy of notice" were accounted for by the Review as being the product of "[...] the same comprehensiveness and minuteness of observation [...]" of Hahnemann himself and should not be eliminated. The Review concluded:

"That they are important, that they are indeed real manifestations of morbid action, and that they have proved of value in deciding the relative claims of two otherwise similarly acting remedies, is the testimony of every physician who has surmounted those prejudices of education which run counter to taking notice of such phenomena, and been ultimately guided in his selection by them"[47].

Moreover, homoeopaths in Britain did not accept that Wesselhoeft's investigations had overturned Hahnemann's theory of trituration and solubility. The British

[43] These were often gleaned from allopathic literature.
[44] Pope and Brown (1879) p. 201
[45] Pope and Brown (1879) p. 201
[46] Pope and Brown (1879) p. 201
[47] Pope and Brown (1879) pp. 201-2

Homoeopathic Journal (B.H.J.) of 1880 explicitly sided with O. Buchmann M.D., of Alvensleben, Germany, as to the existence of *transparent* particles beyond the third trituration and eleventh dilution and that such revealed the *infinite divisibility* of matter by that process[48]. Wesselhoeft countered this by claiming that even glass, ordinarily transparent, when triturated was composed of opaque particles[49]. But Buchmann argued that Wesselhoeft had missed particles in his investigation into *aurum* on account of their transparency. Though the B.H.J. of 1882 printed Wesselhoeft's counter response to Buchmann, the Journal's editors agreed with the latter, claiming:

"Dr Wesselhoeft would reject all [clinical] experience and explain otherwise the cures thus wrought. We must say that we think so serious a change of base hardly warranted by the facts now brought to light. Dr Buchmann's attrition-particles [...] acquire a good deal of solidity when amalgamated with the clinical results obtained from the higher attenuations"[50].

The Journal thus concluded that clinical evidence took epistemic priority over microscopical and experimental investigations and demonstrated repeatedly the efficacy of high attenuations, stating; " The therapeutical, like the physiological, test is- when properly applied- conclusive *per se*"[51]. Thus clinical results were epistemically superior to experimental and microscopic investigations when these conflicted as far as British homoeopaths were concerned.

The London based British homoeopath James Compton-Burnett made an implicit reply of a similar kind to Wesselhoeft in his 1879 publication of "Gold As A Remedy in Disease", which appealed to historical and clinical evidence of the utility of *aurum* (gold) in disease well beyond the third trituration. Burnett noted these lines of evidence showed gold particularly useful in diseases of the heart, claiming in his preface that gold "In homoeopathic practice [...] is neglected, and in allopathic

[48] Published in The North American Journal of Homoeopathy (1880) Article XLIII pp 525-583
[49] The British Journal of Homoeopathy Vol XL No CLXI July (1882) pp. 193- 208 records the continuing debate over attenuations carried out at the Homoeopathic Convention of 1881.These sentiments are those of the editors R.E. Dudgeon M.D. and Richard Hughes L.R.C.P.
[50] British Journal of Homoeopathy (1880) Vol XXXVIII pp. 324- 340 .
[51] ibid pp 324-340 (italics original)

practice [...] practically unknown"[52]. Burnett acknowledged this to be the result of the belief of "[...] the metal being insoluble in its ordinary form – [hence] *it is taken for granted* that it *cannot* possess any remedial virtues"[53]. He noted:

"The advance of general and medical knowledge will teach the untutored medical mind what trituration will do in the way of transforming a non-medicinal substance into a potent remedy, but it will, probably, not be the medical mind of the crude chirugeons of the present day. *They* know better"[54].

In his defence of triturated metals Burnett first traced the history of the clinical use of *aurum* in disease. This, he claimed, began with Moses in the Wilderness where gold from the calf idol was ground and the Israelites made to drink the water that contained the gold dust. "Then he [Moses] took the calf that they had made and he burnt it with fire and crushed it till it was fine, after which he scattered it upon the surface of the waters and made the sons of Israel drink it"[55]. Thereafter Burnett traced the therapeutic use of *aurum* through the Greek Dioscorides, then Avicenna, to Paracelsus and subsequently to a host of 17th century practitioners, including J. Colle in 1621 and Planis Campi in 1623. In the early 1800s M. Christien used *aurum* widely in the face of fierce opposition and yet gained a following of "auralists". One such auralist, M. Legrand, performed important pharmacological work on this particular drug, Burnett claimed, and discovered many "facts". By the time of Legrand's work about eighty physicians used *aurum* therapeutically with Legrand himself documenting 387 successful cures of syphilis, leprosy and scrofula with the drug.

In addition to a long historical tradition, Burnett constructed an argument based on clinical evidence from the previous fifty years to support the use of *aurum* in medicine. Burnett admitted homoeopathic provings could be improved with use of the ophthalmoscope, the stethoscope, temperature readings and examination of renal secretions, but that "[...] future Regii Professors of Experimental Drug Pathology will fill in the Hahnemannian Cadre, and thus bring it abreast of modern requirements" [56].

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[52] James Compton Burnett (1879) p. vi
[53] Burnett (1879) p.1 italics original.
[54] Burnett (1879) p. 5 italics original.
[55] Exodus chapter 32 vs 20 Quoted in Burnett ibid p. 10
[56] Burnett (1880) p. 42

In the meantime Burnett considered homoeopathic provings were "[...] immeasurably superior [...] to the cat, dog, and rabbit crudities of the dominant sect in medicine, whose one aim would seem to be to paralyse and kill countless lower animals to see how much a given drug can do and how soon it can do it" [57]. All this was pretty pointless as far as Burnett was concerned since "[...] what we require for clinical purposes is an accurate knowledge of all that drugs can do on the *hither side* of that state of absolutely lethal organic change from which no recovery is conceivable".

Homoeopaths in Britain thus generally discounted the negative data produced by Wesselhoeft and the American Institute. They were able to make this response to error both in their experiments and materia medica because of their continuing Rationalism, and possibly, their social arrangement. The B.J.H. of 1882 cited the eminent Dr Cretin of Paris, who claimed Hahnemann arrived at his conclusions regarding dosage, not after experiment, but by logic. The Journal, whilst recognising Cretin's anti-Hahnemann stance, admitted, " This is indeed a fair suggestion as to one of the pathways by which Hahnemann was led to the dynamisation theory; but it does not account for the original reduction of dosage"[58]. Hence homoeopaths in Britain, unlike those in the U.S. maintained a Rationalist, theoretical component to the empiricism inherent in homoeopathy.

Indeed, Dr Richard Hughes wrote to the Journal in that same year concerning the scientific nature of Homoeopathy, advocating the necessary marriage "[...] of an experimental base and a rational superstructure"[59]. Such a "double advantage" could only be secured by knowledge of the physiological action of drugs on the one hand and the clinical history of disease on the other. "Empiricism may hit here and there on something good for them; but cannot reason do anything with the facts of the case while she holds her theories as provisional only". This was what Hahnemann thought and attempted. Similia was his answer, what Hughes referred to as "[...] a new application of the physiological action of drugs to the phenomena of disease". But the price to be paid was a limited vision for homoeopathy. Not wanting to embrace the whole of medicine Hughes claimed homoeopathy dealt "[...] only with the

[57] Burnett (1880) p 42
[58] The British Journal of Homoeopathy (BJH) Vol XL No CLX April 1882 pp. 106-113
[59] BJH April (1882) pp 106-113

application to disease of the physiological action of drugs". Hughes exhorted homoeopaths to "Let the method we advocate find its proper place, whatever that may prove to be, in general medicine; and we shall resume our ranks in the general body of the profession, and the 'homoeopathic schism' will be healed[60].

Whilst Burnett did anticipate future improvement in the materia medica at the hands of "experimental drug pathology" he shared with the Review a stance more similar to their allopathic than their homoeopathic colleagues in America. Like the Review, Burnett appeared unconcerned with the errors generated by the investigations of Wesselhoeft, claiming Hahnemann's proving of *aurum*, whilst brief, was accurate and that of Hughes in "Pharmacodynamics" was probably unsurpassable. Whereas Burnett ignored the negative data generated by the American Institute's investigations, and attempted to show the superlative nature of clinical cases, the Review accommodated error into the materia medica by re-ordering the data, rendering it internally coherent. Burnett appeared to bar the monster- Wesselhoeft's experiments were not "real" homoeopathy since epistemic authority still resided with provings and clinical cases. Meanwhile the Review adjusted the monster of "voluminous symptoms" by noting and rectifying repetition. Rationalist underpinnings gave homoeopaths in Britain licence to side with Buchmann over Wesselhoeft on the basis of clinical evidence and homoeopathic theory. Burnett and the Review linked history and tradition with contemporary clinical practice, preserving a sense of continuity and a means of handling negative data American homoeopaths lacked.

This suggests British homoeopaths possibly inhabited a low grid/high group social arrangement making the exclusion of error easier than its accommodation[61]. What evidence is there for this? It should be recalled that homoeopaths in Britain were a much smaller group than homoeopaths in America, numbering only around 300 at their strongest[62]. Furthermore, homoeopaths in Britain found it much more difficult to make institutional inroads than homoeopaths in America. With earlier licensing than

[60] BJH April (1882) pp 106-113

[61] Interestingly this social form corresponds to the factionalist geologists analysed by Martin Rudwick summarised earlier in this chapter. The 'factionalist' status of British homoeopathy at this time possibly explains the religious overtones of some of their explanations and justifications, notably Burnett's defence of the use of gold with the Biblical tale of Moses and golden calf.

[62] As measured by membership of the B.H.S. See, for example, the Transactions of the B.H.S. 1911 pp vi –xxvi.

the U.S. and centralised governance through the General Medical. Council (G.M.C.) and the London Royal College of Physicians (L.R.C.P.) as well as the estate system within British medicine, homoeopaths in Britain experienced marginalisation in a more closed political system[63]. Recall Hughes' allusion to the "homoeopathic schism" and it is possible to see British homoeopaths as an example of Douglas' small, marginalized low grid/high group arrangement with a dichotomised worldview of insiders/outsiders, of us/other. Such a small group of practitioners made internal roles and statuses fluid and informal. Contributors to the Society's proceedings and journal were many and varied. Size limited bureaux and other offices and oversight of these appeared to change annually, unlike in the American Institute[64]. Only the editorial roles of Hughes, Dudgeon and Drysdale in production of the B.H.J., appear to have been consistent. Whilst informal internal roles were the result in part of size, high group boundaries were to a large extent the result of allopathic monster barring. However, further research is required to confirm these conjectures.

Early Allopathic Social (External) Monster Barring

For allopaths, social, or external, monster barring began as soon as homoeopaths had organised themselves at the national level[65]. Homoeopaths in both the US and UK created national medical societies in 1844 whereas American allopaths formed their medical society, the A.M.A. later, in 1847. In Britain allopaths were already organised, the P.M.S.A. being formed in 1832, becoming the B.M.A. in 1855/6. Whilst Constantine Hering became the first president of the A.I.H., Frederick Quin formed the B.H.S. Both the A.M.A. and the B.M.A. swiftly identified homoeopaths as a professional threat and duly ostracised them from professional association. The A.M.A. codified this exclusion via its Consultation Clause within its Code of Ethics in 1847, the year of its inception, whilst the B.M.A. did not purge itself of homoeopaths until 1857.

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[63] See Squires (1985) and Weatherall (1996). Though Richard Hughes was a Licentiate of the R.C.P. as early as 1874 and both Theophilus Ord and H Wynne Thomas were Members of the Royal College of Surgeons and Licentiates of the Royal College of Physicians

[64] The three sectional committees of the B.H.S. of material medica, medicine and surgery had completely different officers in 1911 and 1912, for example.
in the early 20th century. Transactions of the B.H.S. 1912.

[65] See Phil Nicholls in Dinges (2001) cited in chapter one of this thesis for a social constructionist approach to the institutional divide between homoeopaths and allopaths.

That these allopathic moves constituted monster barring is indicated by the rhetoric employed at the time. Dr Cormack of the U.K. stated in 1851 "[...] it is time for us to be stirring, lest these *apostates*, when actually sheltered [by the P.M.S.A.] damage its respectability, and ultimately endanger its very existence"[66]. Likewise an American allopath recommended to the New Hampshire Medical Society in 1856 such treatment of quackery in general, and homoeopathy in particular,

"[...] should be that of *abomination*, *loathing* and *hate*. It should be considered the unclean thing-foul to the touch, wicked and treacherous to the soul- as a deadly miasm to every generous and benevolent emotion- as the death of every upright principle [...] how can we endure their base betrayal and prostitution of our noble profession?"[67].

Thus homoeopathy was considered a grave error, a pollutant and homoeopaths medical apostates. Homoeopathy was deemed a monster, not real medicine at all, but quackery, and something to be kept "outside the camp" as far as possible. With exclusionary legalistic tactics, such as licensing, unavailable to them, especially in the US, allopaths turned to autonomous (self regulated) means of closure via the institutions of civil society[68]. Hence, homoeopaths were refused entry to allopathic medical societies whilst those who already had membership were expelled. Allopaths and homoeopaths were to have no professional association and allopaths were forbidden from patronizing homoeopathic pharmacies. In 1856 the A.M.A. resolved that homoeopathic works should no longer be discussed or reviewed in allopathic periodicals and the British medical profession soon followed suit.

The very label "quack" used to describe homoeopaths was inaccurate and of pejorative import since all professional homoeopaths in the first half of the 19th

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[66] Quoted in Nicholls (1988) p 136 (italics added).

[67] Transaction of the New Hampshire Medical Society 1856 pp 39-40. Quoted in H Coulter (1972) p 157 (italics original)

[68] The Jacksonian Democratic Era in early 19th century America heralded the end of medical licensing until the turn of the 20th century. In Britain, licensing came under the control of the General Medical Council after the 1858 Medical Act. Since most professional homoeopaths possessed an M.D. many were members and on the G.M.C. register Allopaths failed in Britain to make homoeopathic practice illegal. The Act enshrined a clause that allowed a qualified practitioner to use any therapy he saw fit. See Squires (1985)

century in both countries were allopathic converts, medical students who had studied and gained their medical qualifications within allopathic institutions and according to allopathic educational requirements, only turning to homoeopathy after graduation. The sociologist Paul Starr has noted that such exclusion, or monster barring, continued until late in the 19th century with "The avoidance of contact with homoeopaths [taking] on all the gravity of a pollution taboo" [69].

Expulsions and regulation of physician's behaviour under the consultation clause of the code of ethics suggests that allopaths may have formed a high group/low grid professional association at this time. Membership of the group was dependent upon the confession of not practicing medicine according to a dogma, with the dichotomisation of "insiders" and "outsiders" permitting a successful handling of therapeutic error.

Homoeopaths responded to allopathic monster barring with a measured tolerance. Though they held allopaths to be in ignorance, very little by the way of invective came in response and certainly their respective Code of Ethics did not possess a similar consultation clause. Indeed, homoeopaths generally considered it both desirable and inevitable that allopaths would eventually come around to their way of thinking and *openly* adopt homoeopathy. Indeed, at this point it was expected homoeopaths would be welcomed back "[...] into the fold"[70].

American Allopaths'Response to Epistemological Error.

American allopaths in particular did not have the same universalistic harmonising expectations homoeopaths possessed. The past, not the present, was strewn with trial and error but "[...] how could it be otherwise?" Nathan Smith Davis, long time President and member of the A.M.A., had asked [71]. Davis acknowledged the fact that as physicians "[...] we are told that in small doses [drugs] are stimulant or tonic, and in large doses sedative or narcotic, but at what point in the progress of increasing the

[69] Paul Starr (1982) The Social Transformation of American Medicine p. 98
[70] See Kaufman (1971), Coulter (1973) and Rothstein (1972)
[71] N.S.Davis (1874) p 101.

dose the action becomes reversed, no one appears able to point out with exactness"[72]. Yet even here, in recognising the need, like homoeopaths, for the materia medica to be purged of "masses of speculations and mere assumptions" as well as " contradictory modes of practice" the problem is externalised; "we are told" and " no one (rather than we) seems able to point out with exactness"[73]. Allopaths thus displaced the problem to a third party, the conclusions of which they would weigh carefully when the time came.

As well as externalising problems with the materia medica, Davis looked at the broad sweep of history rather than any contemporary crisis to maintain professional legitimacy. Changes in allopathic medical practice were portrayed as part of the natural cycle of history which "[...] is said to be ever repeating itself [so that the] [p]endulum of professional opinion and practice has swung from one extreme to another" [74]. The 19th century had seen first depletion, then expectancy, followed by stimulation but "last year showed it is on its return motion" with a new emphasis upon fresh air, pure water, frequent ablutions, the regulation of food and little alcohol or drugs For Davis this represented "[...] a genuine progress that can be easily recognised in the literature of practical medicine during the past year"[75].

Even the, by now ill reputed and unpopular, practice of venesection was not portrayed as an error. G. F. Cooper as late as 1879 claimed "[...] thirty to fifty years ago the lancet was indiscriminately used and hurtful and ruinous though sometimes we still need to bloodlet" with Davis too advocating the occasional use of the lancet.[76].

American allopaths used physiology as both a trope and a guiding light to medicine. The T.A.M.A. of 1874 hoped "[...] the time is coming when physiological sciences will be able to translate for us the symptoms of disease- these hieroglyphics of nature- as to point us at once to the course of the disease, the anatomical parts affected and the appropriate remedy"[77]. Without such Rational treatment the author lamented that the physician was committed to experimentation, tentative therapeutics and doubtful

[72] Davis (1874) p 113.
[73] David (1874) p 115.
[74] David (1874) p 115.
[75] David (1874) p 115.
[76] Cooper (1879) p 211 and Davis (1874) p 115.
[77] T.A.M.A. (1874) p 157.

results. Indeed, "[..] [h]e is constantly in danger of making mistakes- mistakes in diagnostics, mistakes in remedies. Instances in which he has actually done positive injury are not wanting"[78]. But to remedy this malady the physician was waiting on the physiologist.

American allopaths also limited their claims. After quoting Broussias' comment that "The real physician is the one who cures; the observation which does not teach the art of healing is not that of a physician, it is that of a naturalist" Henry D Didama claimed "Therapeutics then [...] includes all means to *prevent and manage* disease [...]" (i.e. not cure necessarily -italics added). Finally, medical errors were explained in terms of a lack of licensing and low medical educational standards. Didama noted in 1884 that "[...] [to] serve the public wisely and well, the Board [of Examiners] should subject every applicant [...] whatever his prejudices or intentions may be, to the same examination in every branch of medical science, as understood by the vast majority of the profession"[79].

Allopaths in Britain

The Royal College of Physicians of London openly disapproved of unorthodox medical practice but after 1858 was unable to take prohibitive action[80]. They continued, however, to discourage association with unqualified practitioners and in 1881 resolved that;

" [...] the assumption or acceptance by members of the Profession of designations implying the adoption of special modes of treatment is opposed to those principles of the freedom and dignity of the Profession which should govern the relations of its members to each other and to the public. The College therefore expects that all its Fellows, Members and Licentiates will uphold these principles by discountenancing those who trade upon such designations"[81].

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[78] T.A.M.A. (1874) p 158.
[79] Didama (1874) p 619
[80] Sections 23 and 28 of the Act permitted registered practitioners to adopt any theory of medicine or surgery they pleased See Cooke (1964) p 908.
[81] Cooke (1964) p 909. Interestingly, the freedom and dignity of the profession and the doctor's right to choose which therapy he deemed most appropriate in any given case was the argument also used to resist calls for the denouncing of psychoanalysis requested by some college members.

Allopaths' initial refusal to consult with a homoeopath metamorphosed into refusing to even attend upon a patient who had *previously* consulted a homoeopath. Such monster barring was evident in the treatment of Lord Beaconsfield in 1881. Dr, Kidd, who was known to practice homoeopathy, had attended upon Beaconsfield in what turned out to be the closing days of his life. Allopathic attendance was also requested but enquiries made by the doctor to a former President of the college (probably Sir Thomas Watson), who advised that since Dr. Kidd had admitted he was not using homoeopathy on this occasion and that he was a registered practitioner, the allopathic doctor could attend without recrimination. Indeed, an amendment to the above resolution "[...] that no competent medical man can honestly practise the so-called system of homoeopathic medicine [...]" was, after discussion, withdrawn.[82]

Nevertheless, allopathic monster barring did appear to impact on homoeopathy's dissemination in the U.K. In 1882 a contributor to the M.H.R. noted that the principles of homoeopathy still remained "[...] untaught in the schools, and their discussion disallowed in the medical societies and journals"[83].

Internally, most allopathic errors appeared in the context of clinical cases and new discoveries in physiology and pathology and the manner in which allopaths dealt with them was in marked contrast to homoeopaths. J. B. Berkart, for example, as Assistant Physician to the City of London Hospital, admitted, "The failure in the treatment of phthisis is, I think, mainly due to the existing uncertainty of [phthisis'] pathological conditions"[84]. However, "The desponding view which was formerly taken of the treatment of phthisis has of late, thanks to an improved knowledge of the pathology of the disease, given way to better prospects of a more successful treatment of the disease". We see again the monster barring technique of externalising error, and responsibility for improvement in treatment outside the everyday practice of the physician (i.e. outside the "camp"), in this instance to pathologists.

[82] Cooke (1964) p 909.
[83] M.H.R. May 1st (1882) p 307.
[84] The Lancet Oct 18th (1873) p. 553.

Like their American counterparts, allopaths in Britain used the trope of physiology to characterise the physician's dilemma. The Lancet of November 1880 claimed:

" [We are] told on physiological authority that the average length of life of new physiological facts- a very curious use of the word fact to us- may be reckoned at about three years, we can understand its influence in training the mind to reason on data of mixed and uncertain value, and of strengthening the faculty of struggling to a conclusion out of the confusion of conflicting facts and views" [85].

Indeed, facts and theories for the allopath were not of equal merit, the former being astutely selected by the "physiologically trained" reason of the physician. On the other hand many of physiology's errors arose from:

"[...] defective data rather than to any illogical course of reasoning [...] Of course such disastrous results can only happen when the student does not appreciate the true methods and value of physiology and fails to disentangle theories from facts; but how large a proportion of men fail in a just discrimination of these essentials"[86].

In fact greater precision within physiology approaching that of the physical sciences was not to be coveted since such "[...] would [...] sacrifice its present efficiency in developing the power of inference from approximate data only"[87].

Thus, the changing and uncertain face of physiology not only mirrored the changes and uncertainty the physician met with in his practical knowledge base, but explained his therapeutic failures. Cultivation of this type of induction characteristic of physiology could not be overstressed for, the Lancet warned, "[...] it is ever in demand in the daily life and work of our profession"[88]. The Lancet therefore favoured maintaining the status quo of physiology's subservience to anatomy.

The Lancet of April 1873 noted how inconsistencies and misunderstandings within the medical literature could be remedied by a standardised phraseology. As with

[85] The Lancet Nov 27th (1880) p 860
[86] The Lancet Nov 27th (1880) p 860
[87] The Lancet Nov 27th (1880) p 860
[88] The Lancet Nov 27th (1880) p 860

British homoeopaths, Rationalism gave British allopathic physicians liberty to appeal to textual analysis in the face of error. Wilson Fox of the Pathological Society of London favoured the return of the phrase "tubercle" to be applied to the essential pathological elements of all phthisical disease, whereas The Lancet preferred the designation "tuberculosis" for the general state and "tubercle" for local changes.

"A substantial *alteration in phraseology* in regard to such matters as phthisis and tubercle ought [...] not to be undertaken. [lest] we return to that chaos which Dr. Bastian ably described as reigning within the forty years immediately succeeding the publication of the doctrines of Laennec"[89], the Lancet warned.

Time was deployed effectively by allopaths in Britain in order to handle disparate data. The British Medical Journal (B.M.J.) of March 22nd 1873 noted an attempt to unify diseases of the lung in accordance with the presence of tubercles. The writer concluded "I find in the lungs of patients dying of phthisis almost identically the same changes as those found in the lungs of children dying of acute tuberculosis, with such variations of anatomical changes as may, I think, be tolerably clearly traced to lapse of time"[90].

Likewise the August 25th issue of the B.M.J. of the same year noted the erroneous treatment by allopaths of anaemia with iron and aloetic medicines when in fact anaemia was a disease of the nervous system. In turn this was often the result of fright or some deep emotional shock. Outpatient findings from St Bartholomew's Hospital, London were cited as evidence as was the rational move of association- anaemia was often associated with Grave's disease and Chorea, both affectations of the nervous system.

John Clay M.D. of Birmingham, England, for example, reported to The Lancet in 1880 his findings regarding the use of *chian turpentine* in cancer of the uterus. Clay's article was in response to the failed experiments of a Mr Morris who claimed he had refuted Clay's claims for the drug, stating, "I am not able to report that there is a single symptom over which the drug seems to exercise even frequently, not to say

[89] The Lancet April 5th (1873) p 490-1
[90] British Medical Journal March 22nd (1873) p 326

constantly, an influence"[91]. But Clay criticised Morris' sample cases, claiming he had never meant for the remedy to be used on cases verging on death, which Morris had clearly done. Nor would turpentine build up a new uterus, repair cancerous fistula, or patch up a cavity in the bladder. "Yet several of the cases described by Mr Morris were of this character; and in these and in other cases of the same extreme gravity the remedy might well be deemed useless". Rather, Clay recommended the remedy be given "[...] a prolonged and careful trial [...]" and only on "[...] three or four *careful selected* cases of cancer" and certainly on no subjects "in which the destructive agency of the disease had involved any other vital organs [...]"[92].

Clay claimed his own experience contradicted that of Morris along with two cases reported in the Lancet and the large number of cases treated at the Queen's Hospital during the previous eight months. On these *clinical and methodological* grounds Clay rejected Morris' claims as mistaken, accommodated a potential error and said " I think I am justified in coming to the conclusion that *chian turpentine* is far from being 'useless' in the treatment of cancer"[93]. The contrast of Clay's positive conclusion with the negative one of the homoeopath Wesselhoeft after two trials of *carbo veg* as "valueless" could not be more striking.

Similarly, The Lancet of May 1880 cautioned against Julius Cohnheims "[...] sweeping hypothetical statement, although advanced as a safe generalisation [...]", that tuberculosis was an infectious disease due to a specific virus[94]. One should not apply conclusions from experiment to explain the origin of the disease in man, the Lancet claimed. Showing their deftness in selecting what was useful to them the Lancet concluded, "[...] it must at the same time be remembered that because a theory is not entirely true, it is not, therefore, entirely false. Tuberculosis may be communicable, and yet not always or often due to the reception of a poison from without"[95]. Just as allopaths were able to keep homoeopaths out of their ranks, so they were able to dismiss contradiction, inconsistency and uncertainty.

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[91] The Lancet Dec 11th (1880) p 956
[92] The Lancet Dec 11th (1880) p 956 (italics added)
[93] The Lancet Dec 11th (1880) p 956
[94] The Lancet May 8th (1880) pp 727-8
[95] The Lancet May 8th (1880) pp 727-8

The Social Construction of Epistemological Failure

The 1870s saw both homoeopaths and allopaths in the U.S. responding to a crisis of legitimacy in medicine in a political climate of open competition and little regulation. Both were concerned with the action of drugs and their properties. Both knew of errors of speculation and imagination in their materia medica. Both recognised the reverse action of drugs and the problem of the dose. Homoeopaths, however, made no mention of diversity in practice and allopaths failed to construct a programme of materia medica reform, even though they acknowledged its necessity. Most importantly, American homoeopaths in the mid 1870s became concerned with "non cures".

Whilst both American and British allopaths maintained a strong Rationalist element to their epistemology, even if this was only in the form of the right of the physician to use his "rational judgement" in a clinical setting and not be dictated to by a professional body, American homoeopaths became almost exclusively Empiricist[96]. In the hands of the leadership of the A.I.H. much of the Rationalism inherent within homoeopathic theory became eclipsed in a drive for scientific legitimacy, and was discounted by the allopathic profession as "mere Empiricism". Recall that the problem of non-cures referred to by Dake was considered a problem of the materia medica and false provings. American homoeopaths interpreted the route out of this impasse completely in empirical terms. This they were not compelled to do. I argue there are four reasons why American homoeopaths were so empirically driven.

First, homoeopaths came to occupy an extremely narrow epistemological space. Though allopaths considered themselves professional Rationalists they vilified the *methodological* Rationalism of their own past as the cause of excesses in their profession and its weakened state. The American medical historian J. H. Warner has

[96] J.H. Warner (1997) claims that allopaths before 1885 identified themselves as methodological Empiricists but professional Rationalists. To be vice versa i.e. a professional Empiricist and a methodological Rationalist bore negative connotations. This is a label allopaths seemed content to attach to homoeopaths. However, I wonder to what extent this is problematic for Warner since he links medical identity with practice. Thus, on this estimation allopaths would have been considered Empiricists. I wonder to what extent Warner has been influenced by the rhetoric of 19th century allopathic practitioners. Also, if homoeopaths were being labelled as methodological Rationalists this may also have had a bearing upon the homoeopathic turn to Empiricism.

shown that allopaths explicitly identified homoeopaths with their own vilified Rationalistic past in order to stigmatise them [97]. Indeed, Alfred Stille in 1848 equated the "medical systems" of Brown, Rush and Broussais with Hahnemannianism in the same breath. The trick, of course, was that by that time no one credited Brown, Rush or Broussais as having anything of great value to contribute to medicine anymore. That homoeopaths largely ignored Hahnemann's theoretical explanation based on the miasms, then, indicates their inability to inhabit any epistemological space with Rational, or "systemic" overtones. The stigma attached to systemic medicine contributed to homoeopaths excluding miasmatic explanations from their handling of error.

Over fifty years earlier Hahnemann had wrestled with the problem of clinical relapse. In "The Chronic Diseases" of 1828 Hahnemann explained these, not in terms of error within the materia medica, but in Rational terms, arguing that underlying many acute diseases there existed one, or a combination of, three chronic miasms; psora, syphilis and sycosis. Only by dealing with the underlying miasmatic weakness would relapse be averted and cure achieved. Yet both of Hahnemann's seminal theoretical works, "Organon of Medicine" (1810) and "The Chronic Diseases" (1828), had been virulently dismissed by allopaths earlier in the century as "physiological transcendentalism", "absurd dogma" and the product of "dreaming theorists"[98].

Had American homoeopaths not been so averse to homoeopathic theory it is likely they would not have been so slavishly driven to incorporate all *experimental data,* or even data generated in multiple contexts. Further, homoeopaths in a dual closure strategy attempted to distance themselves from mesmerists, spiritualists and other quacks[99]. Their rejection of "spirituality" did not lead to the rejection of the vital force, of course, which allopaths themselves adhered to until the beginning of the 20th century. It did however, after the microscopic investigations of Wesselhoeft and

[97] Despite acknowledging the attempt by allopaths at deliberately depicting homoeopathy as the 'other' in medicine, Warner appears deceived by this rhetoric by overly dualising history and failing to see that during the 1870s and 80s homoeopathy was a part of medical science, as it was understood at that time. This is one of the points I have attempted to demonstrate in this thesis. See J. H. Warner (1998)
[98] Coulter (1973) pp 160, 165 and 161 respectively
[99] Which means they desired to be admitted into the more powerful group but sought to keep others out of theirs. See Anne Witz (1992) p 45

others, make an explanation of the operation of the similimum beyond the sixth dilution impossible.

Secondly, homoeopaths, up until the end of the 19th century had a unified world-view. They believed they were custodians of the great Therapeutic Law and that the perfection of that Law would be realised through an experimental proving programme. But similia both unified and destroyed. It unified because it was the one thing all homoeopaths adhered to as the unfailing guide in therapeutic practice. On the other hand it came to be, in theoretical terms, a hard task- master especially in the American context. C.H. Lawton alluded to this in his address to the Institute in 1880 claiming, "[...] science does not consist in an accumulation of facts merely, there must be knowledge of principles whereby we may trace the unknown, from known phenomena, and may arrive at definite conclusions"[100]. But the interpretation of that was, "[...] while acting consistently with those principles, we can never make a mistake [and] all truths must harmonize!"[101]. When clinical and experimental results contradicted each other that harmonious unity was unrealisable. Homoeopaths were thus unable to live up to their own vision of scientific medicine.

Thirdly, I suggest that the response to error by American homoeopaths, as represented by the A.I.H, reflects the possibly static nature of the American Institute as a professional group. In Douglas terms I predict further investigation will find them to have occupied sector C, taking on a high grid and high group social form. Even at the beginning of the 20th century when the A.M.A. was undergoing profound organisational changes, which coincided with them abandoning the consultation clause and inviting homoeopathic membership, the A.I.H. did not make similar changes [102]. This tendency to stability within American homoeopathy has also been noted by Naomi Rogers in her analysis of the Hahnemann Medical College of Philadelphia, America. Claiming the Hahnemann trustees and faculty during the difficult early decades of the twentieth century tended to be "reactive rather than visionary", Rogers claims the survival strategies of the college were those of

[100] TAIH Transactions (1880) 38th session p 215
[101] TAIH Transactions (1880) 38th session p 215
[102] See Coulter (1973) pp 402-465.

"stability, integration and expansion"[103]. Interestingly, Rogers highlights this stability as a function of leadership from the college's senior faculty who integrated both old and new traditions in a period of financial crisis and political pressure. Such integrative moves were manifest in the college's response to the advent of bacteriology. Whilst few homoeopathic educators travelled to Germany to study the new discipline, bacteriology did become incorporated into the college curriculum at Hahnemann, as elsewhere, in accordance with its policy of training its graduates for both general practice and clinical work. Philip Sharples Hall was one Hahnemann educator who visited Heidelberg from 1894-5 and became the college's hospital pathologist and in 1897 the director of the college's histology laboratories. Whilst facing a lack of space and nursing support and with a staff who did not know how to prepare specimens adequately, Hall's appointment shows the ability of homoeopathy to integrate tradition and innovation, since the Hahnemann College maintained its distinctive homoeopathic identity until well into the 1940s.

Whilst suggesting that science as bacteriology, was commensurable with homoeopathy at this time, such integrative abilities were in fact homoeopathy's undoing. Homoeopaths lacked interpretive agreement, selection criteria, a framework for deciding what data to recognise and what to discount, or in the face of competing evidence, which had priority. Larry Hedges has shown that such agreement within a community of researchers, rather than revealing access to some "truth" about reality, is the essential component to perceived cumulativeness[104]. It was not that the suggestion was never made among homoeopaths to discount microscopical analysis, or to ignore apparent refutations. It was rather that the criteria for doing this were never agreed upon. This gave the impression that homoeopaths' knowledge base was non cumulative at both the empirical and theoretical levels. Clinical findings did not fit with experimental and microscopic data. Experimental data undermined many of the traditional provings and microscopic data undermined the concept of the minimum dose. Indeed, whilst, as I have already mentioned, Rationalism is intrinsically data selecting, there was particularly implicit in the 19th century homoeopathic incarnation of empiricism a tendency to incorporate all data. William

[103] Naomi Rogers (1998) p 105
[104] Hedges (1987) was engaged in a project that attempted via meta-analysis to integrate disparate findings in psychology.

Boericke in 1896 endorsed Hahnemann's 19th century premise of the "Organon", that the homeopathic prescription should without exception be based upon the *totality of symptoms*. Whilst there was dispute regarding what constituted a true "totality", that is, what significance should be accorded pathological and idiosyncratic symptoms and the intuitive interpretation of the case, all agreed with Boericke that "We cannot hope to attain the highest aim of healing [...] except by following out Hahnemann's directions in regard to the totality of symptoms"[105]. Thus, inherent in homoeopathic prescribing was a prohibition on discounting data.

In their experimental enterprise homoeopaths were also prone to setting themselves, what today would be considered, unreachably high statistical standards in establishing efficacy. In the Milwaukee test, for example, highlighted in chapter two, Sherman claimed "If a hundred physicians engage in making the test and all, or nearly all, single out the Aconite pellets, the inference will be that the 30th dilution represents the medicinal properties of Aconite"[106] and also that "If there be only about fifty per cent of successes, the inference will be that the 30th dilutions have no curative powers". Sherman estimated that a I in 10 success ratio for guessing the remedy correctly could be attributed only to chance, since "[...] according to the law of probabilities, about one in ten would guess right without making any trial"[107].

Allopaths on the other hand were far more self- sparing. Unlike homoeopaths, allopaths had not become empiricist and maintained sufficient Rationalism to enable them to handle error effectively, though this time round it wasn't the Rationalism of the "system" but that of the individual physician that held epistemic authority. As Warner has pointed out, allopathic anti-Rationalism (in the form of anti-systemic medicine) led directly to the insistence by the leadership that allopaths "[...] should follow their own judgement in prescribing [and] not adhere by rote to any therapeutic system"[108]. Further, allopaths showed the ability to focus, not on detail, but on overall trends, Davis using s pendulum metaphor to describe the vicissitudes and provisional nature of medical theory and practice. This enabled allopaths to tolerate errors in the present whilst hoping for a better future.

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[105] T.A.I.H (1896) pp 274-306
[106] T.A.I.H. (1879) p 235
[107] TAIH (1879) p 235.
[108] J.H. Warner (1998) p 11

Similarly, homoeopaths in Britain were far more adept at handling error than their American counterparts since they maintained sufficient theory within their epistemology. Recall Burnett did not even cite the experiments in America during the 1870s and the British journals sided with Wesselhoeft's adversary. Burnett and the British homoeopathic community in general favoured clinical and historical over experimental evidence, and textual analysis to bring coherence to the materia medica. For Burnett in particular it was inconceivable that a few recent experiments could overturn the weight of history and possibly indicates the low grid arrangement of British homoeopaths. It may be that a lack of social differentiation favoured such intellectual coherence but this requires more research.

The failure to establish a homoeopathic college of provers in America was a significant failure for homoeopathy. If homoeopathic knowledge production had been removed from private practice homoeopathic knowledge may have gained further status. Dake correctly perceived the invitation from the American Otological and Ophthalmological Society to assist them in determining drug action on ear nose and throat as an "auspicious moment". Sadly, it was one homoeopaths failed to embrace. Had they done so new career trajectories within homoeopathy may have developed.

This may have placed homoeopathy in a different position when at the turn of the 20th century medicine underwent rationalisation? Steve Sturdy and Roger Cooter claim the transformation of the relations of medicine, which occurred in the early part of the 20th century were facilitated by the adoption of laboratory based sciences [109]. By the end of the 19th century there was an increasing rationalisation and standardization of practice in medicine as the principles of scientific management were applied to medical institutions, especially hospitals, to run them more efficiently and cost effectively as costs spiralled upwards. Hence, a corporatizing of socio- medical relations ensued, coupled with a transformation of knowledge production from the clinical experiences of the physician to the physiological and bacteriological experimentation of the laboratory.[110] However, as Sturdy and Cooter point out the laboratory, as an epistemic location does not, and did not, determine the kind of

[109] Sturdy and Cooter (1998)
[110] Vogel (1989) pp 243-260

episteme that would be produced. Rather, they state, "[...] clinicians were perfectly able to assimilate the laboratory sciences to the forms of cognition and practice that they favoured." and that, "the integration of laboratory based knowledge and techniques into hospital practice did not imply any necessary change [...] in the individualized style of clinical knowledge that legitimized it". Rather, such was contingent upon the ways in which laboratory based medicine was used to enhance the reformers realisation of their own ends[111].

Conclusion

In this chapter I have argued that the A.I.H. in the late 19th century possessed a complex, totalising classification system and in its valorisation of empiricism over Rationalism, attempted to integrate data of different kinds generated in disparate settings. This amounted to a failure by homoeopaths to eliminate error from their knowledge base; specifically to remove contradictory symptoms from their materia medica, to reject the findings of the Milwaukee test and to ignore Wesselhoeft's negative microscopical conclusions.

On the basis of Douglas' grid /group theory, Bloor's application of the model to mathematical error management and the case studies cited demonstrating the reliability of the model, I hypothesise that homoeopaths in the A.I.H. occupied a social form that was too static for a dialectic approach to knowledge to arise or for a monster barring mindset to prevail (as allopaths possessed). It's possible a lack of competitiveness existed within American homoeopathic medicine along with a traditional approach towards internal appointments and a collaborative attitude toward research. Appointments within the A.I.H. appear to have been particularly static, such as that of Wesselhoeft to the head of the Bureau of materia medica apparently spanning thirty years, but further investigation into the organisation of the Institute are required to confirm this. Had homoeopaths developed the appropriate institutional apparatus, that is, their own proving laboratories separate from general practice, the internal competitiveness necessary for a system of proofs and refutations to emerge may have developed. Further research may wish to speculate, counterfactually, on the

[111] Vogel (1989) p 442

possible outcome of such a removal of homoeopathic provings from general practice and into institutional settings for the development of medicine.

British homoeopaths, on the other hand, being a smaller group and occupying a more threatened position in the British medical community were able to engage in monster barring manoeuvres. Appealing to historical and clinical over experimental evidence, leaders in the homoeopathic profession such as Burnett sided with Buchmann over Wesselhoeft in the dispute over triturations, dilutions and microscopical analyses. Hence, for British homoeopaths, the epistemological crisis that haunted their American counterparts for the last two decades of the 19th century had little impact. Allopaths, who believed that a physiological fact was here today and gone tomorrow, shared a similar intellectual licence

But, the question remains, which comes first, changes in the social or institutional environment or changes in knowledge form/error management? Bloor gives temporal priority to social processes (not surprising given his intellectual lineage) whereas Douglas suggests either may occur first or that they may occur simultaneously. Douglas claims, "The big push that changes classification must be big enough to redistribute power as well"[112]. Owen, Rudwick and Ostrander suggest such change usually occurs on the A/C diagonal. In the event, homoeopaths were unable to achieve this change.

Moreover, homoeopaths jettisoned essential rationalistic elements from their epistemological framework in their eagerness to engage with science, distance themselves from the Rationalism of allopaths and reject the spiritism of "mystical" groups such as Mesmerists. Thus, homoeopaths had too little theory rather than too much and in the American context this was so extreme that their ability to eliminate data was severely curtailed. Homoeopaths believed that if *similia* were true all data would harmonise. The late 19th century return of Rationalism to homoeopathy was too little theoretically, too late and represented for medicine generally a lost opportunity. Homoeopathy failed to remain a part of science.

[112] Douglas (1996) p 64.

Modern day homoeopathy, especially the kind published in the journal "Homeopathy" by the B.H.S. should take heed of the warning regarding minimal theory, excessive empiricism and infinite integration. Homoeopaths should recognise the unsuitability of an experimental and physical chemistry methodology as its epistemological base where theory is lacking. History shows that clinical and even physiological evidence has always shone more kindly on homoeopathic practice. Theory gives medical investigators licence to discount data that may undermine cumulativeness. Without theory all data has the potential to take on equal weight. Thus, the lesson of history for homoeopathy is not to maginalize homoeopathic theory from experimental practice. Likewise, current "evidence -based" medical practice in biomedicine places allopathy in a vulnerable position. If the past is anything to go by, that particular project has no future.

In the next chapter I will show how homoeopaths also had an explanation missing from their epistemology whilst allopaths succeeded in conceptually colonising key aspects of homoeopathic knowledge.

Chapter Four

Masters of the Universe: Allopaths' Conceptual Nihilation of Homoeopathy and Homoeopathy's Missing Explanation.

So far I have made three points in this thesis. First, that, historiographically, homoeopathy's clinical history has been overlooked. This has contributed to homoeopathy's historical representation as primarily a reaction to and modifier of allopathic medicine. Secondly, I have suggested that homoeopathy in the 19th century was part of science (in its evolving incarnations), with an emphasis upon physiology in the UK, microscopic analysis in the U.S., and a general concern with pathological anatomy and experimentation. Thirdly, the last chapter showed that homoeopathy, particularly in the U.S., had become overly empiricist, which led to a poor handling of experimental error.

The remainder of this thesis will use the conceptual schema of Berger and Luckmann to show how homoeopathy's search for scientific status, as well as being undermined by a poor handling of error, was further weakened by allopathy's incorporation of key homoeopathic precepts[1]. First, I will show that, whilst the theory and practices of homoeopathy and allopathy differed significantly in the first half of the 19th century, by the end of the century allopaths were explaining some of their own experiences of medical phenomena in terms of key homoeopathic theoretical concepts *and* adopting core elements of homoeopathic practice. Secondly, I will suggest that homoeopaths failed to achieve the converse; that is, to explain crucial aspects of allopathic medicine in terms of their own, homoeopathic, world view. Thirdly, I will argue that the reason for this is that homoeopaths failed to take ownership of a vital explanatory and rhetorical device that was available to them. This was homoeopathy's "missing explanation." First, however, a brief explanation of Berger and Luckmann's theoretical framework is necessary.

[1] Berger and Luckmann (1966)

Berger and Luckmann's Social Construction of Reality

For Berger and Luckmann, like other social constructionists, the social order is an ongoing human production. The social order does not have a material reality apart from the social activities associated with it since these activities are constitutive of it. To think otherwise is to reify the social order, thus no other ontological status can justifiably be given it. Social reality is thus precarious and a construction in the face of chaos. It is Berger and Luckmann's concern to discover how such a reality is constructed and maintained.

Whilst they possess an eclectic lineage, Berger and Luckmann's thesis can ostensibly be seen as a fusion of phenomenology and Marxism. Following in the phenomenological line of Edmund Husserl and Alfred Schutz, Berger and Luckmann emphasise social reality is an ongoing intersubjective construction whilst from Marx they inherit the concept of the dialect. In their concern with both social meanings and material bases, with actors and structure, their central question is "How is it possible that subjective meanings *become* objective facticities?" (italics original) [2]. Thus from the "objective" side of the equation Berger and Luckmann's chief concern is to determine how knowledge is transmitted. They claim all social institutions are constructions made up of "habitualised" actions (behaviours repeated into a pattern of responses producing economy of thought and action) and "objectivated" meanings (meanings divorced from their original subjective expression), which are conceived of as "knowledge". They ask how such knowledge, divorced from immediate experience, is transmitted and *legitimated.* Such legitimation produces a second order objectivation of meaning, in so far as it produces new meanings to integrate the meanings already ascribed to disparate institutional practices. The problem of legitimation inevitably arises when the objectivation of the (historical) institutional order is to be transmitted to a new generation, when the unity of history and biography has been broken. In this process knowledge precedes values. The individual is told why things are what they are and why he should perform one action over and above another. The action is legitimated.

[2] Berger and Luckmann (1966) pp 29-30,

Berger and Luckmann identify four levels of legitimation in knowledge maintenance and transmission of varying levels of complexity and sophistication. The most relevant for my purposes is the fourth and most sophisticated one- the "symbolic universe"[3]. The symbolic universe is a body of theoretical tradition, which integrates different provinces of meaning and encompasses the institutional order into a symbolic totality. Symbolic processes are processes of signification that refer to realities other than those of every day experience. The sociological project then becomes one of looking at the ways in which each universe legitimates itself, or which "machineries of universe maintenance" are called upon. A perfect society would be self- maintaining, but systems are rarely so closed and efficient in their socialization processes.

Universe maintenance becomes especially necessary when a deviant conception of reality threatens the maintenance of the symbolic universe and the institutional order. Here Berger and Luckmann introduce their very useful concept of "nihilation" to show how groups under threat attempt to neutralise an enemy, whether that enemy is an individual, a group, or an idea and whether the threat is perceived as originating from within or outside the social group or institution. I use nihilation here *only* to mean negative legitimation, or neutralisation. It involves the denial of the reality of an external phenomenon which does not fit into an existing symbolic universe. As Berger and Luckmann note negative legitimation can take two forms and can be characterised as first and second order de-legitimation strategies, which are ontological denial and conceptual translation, respectively[4]. The first order strategy of nihilation is straightforward denial, whereby the phenomenon is denied any ontological status. It is not real. It has no legitimacy whatsoever. The second order strategy involves explaining the knowledge and practices of the deviant knowledge system in terms of one's own conceptual machinery so that the knowledge is neutralised or "liquidated". That is to say such knowledge does not disappear but is incorporated into what I call the "receiving symbolic universe". Such liquidation deprives the deviant knowledge system, either in whole or in part, of its power to critique its opponent. In this process the knowledge base of the receiving symbolic

[3]Berger and Luckmann (1966) pp 110-146
[4] Berger and Luckmann (1966) p 132

universe is modified, or even changed radically. In turn, the knowledge claims of the "sending group" are nihilated, so that the group experiences a loss of cognitive authority. As Berger and Luckmann put it;

"The deviant conceptions are not merely assigned a negative status, they are grappled with theoretically in detail The final goal of this procedure is to *incorporate* the deviant conceptions within one's own universe, and thereby to liquidate them ultimately. The deviant conceptions must, therefore, be *translated* into concepts derived from one's own universe. In this manner, the negation of one's universe is subtly changed into an affirmation of it. The presupposition is always that the negator does not really know what he is saying. His statements become meaningful only as they are translated into more 'correct 'terms, that is, terms deriving from the universe he negates [...] .If the symbolic universe is to comprehend all reality, nothing can be allowed to remain outside its conceptual scope" [5].

It is important to bear in mind that nihilation is not synonymous with "annihilation". A social group and its attendant knowledge base may survive a nihilistic attack from a dominant or competing group for some time, but the attack will disempower that group by reducing its cognitive distinctiveness and authority.

In his study of collective intolerance Fred Willhoite uses Berger and Luckmann's twin conceptions of "symbolic universes" and "nihilation" and asks *when* and *why* are deviant phenomena perceived as such by a social group?[6]. Drawing on evolutionary biology Willhoite claims both primate studies and man's history show that the nihilative response is genetically "hard wired" into the human constitution. Natural selection favours certain responses that equip an organism for survival. In this case, collective intolerance, and the nihilative response it evokes, have favoured human survival in the past. As such, there now exists a genetic component to this perception and response so that, whilst not genetically determined, they are *easier for humans to learn* than alternative responses.

[5] Berger and Luckmann (1966) pp 133-4
[6] Bloor raises this very objection, that Lakatos does not suggest when and why a threat or counter example to a conjecture, is perceived as such.

Willhoite's paper usefully shows the ubiquity of nihilative responses, yet in the context of this study, his conclusions do not explain the failure of homoeopaths to make nihilative counter responses. If collective intolerance is genetically predispositioned why did homoeopaths find this so hard to *learn*? In this chapter I will argue that 19th century allopaths perceived homoeopathy as a threat to their symbolic universe in a way that homoeopaths did not. I will show how allopaths used nihilation successfully, first against Herbalists, Thompsonians and other "vegetable doctors" and later in the 19th century against homoeopaths. I will show how this nihilation occurred in three ways. First, allopaths attempted to simply deny the ontological status of homoeopathic phenomena. This proved unsuccessful, even counter productive. Secondly, I will show how, as a result of the failure of this first order nihilative strategy, allopaths incorporated the concept of the healing power of nature, or *vis medicatrix naturae,* into their knowledge base. Thirdly, allopaths nihilated homoeopathy be incorporating two key homoeopathic concepts into their symbolic universe, that of similia and the minimum dose. This conceptual nihilation was mediated through the language of bacteriology and is the subject of chapter five. By contrast, I argue that homoeopaths had an explanatory tool that could have potentially nihilated, or given negative legitimacy to, allopathic theory and practice but they did not use it. I argue this constitutes homoeopathy's "missing explanation", one that contributed to a significant lack of legitimation for them and the loss of cognitive ground.

Neutralising the First Enemy; How Allopaths Dealt with the Vegetable Doctors.

Before homoeopathy ever posed a threat to allopathic medicine, herbal medicine, particularly in the form of the Thompsonian movement, offered allopathy serious competition, especially to rural American medical practitioners. Thus, nihilative machinery was employed to liquidate this external threat. Second order nihilation, that of incorporating the deviant phenomena after grappling with it seriously in detail, was resorted to only after the primary one of denying ontological status to this rival reality claim failed. Thus certain herbal preparations and techniques were incorporated into allopathic practice and translated into the allopathic universe of meaning.

The allopathic first order critique of herbalism took two forms; herbs were poisonous, or herbs were inert. These denials of ontological status to herbalism as *medicine* were sometimes expressed through litigation but such legal challenges, in a climate of Jacksonian democracy, were generally unsuccessful. Samuel Thompson, founder of the Thompsonian movement, had manslaughter charges brought against him when a patient died after he had prescribed *lobelia tea* for her. The case was thrown out of court when Thompson's lawyer openly drank the tea before the jurors, with no ill effect. Hence a different allopathic approach was necessary and represents an early example of allopaths incorporating a rival reality into their own universe of meaning.

The A.M.A.'s section on Materia Medica commented in 1848, only a year after the association's inception, that "Every kingdom in nature opens its bosom and stretches forth its hands to tender its benefits; every plant and flower, every hill-top, every valley, the mountain and the sea, all afford him curative agencies, challenge his interests, and awake his gratitude"[7]. Herein lay the allopathic seeds of nihilation, of the Thompsonian movement in particular, and the vegetable doctors in general.

In the same year the A.M.A.'s Committee on Indigenous Medical Botany, the formation of which represented a second order nihilative response, reported; "[...] there is an opinion extensively entertained by the mass of mankind, that there exist in the vegetable kingdom of every country appropriate and effectual remedies for the diseases of that country" [8]. The committee agreed, adding;

" And it is this opinion [that every locality provides plants for curing disease found in that locality], sedulously fostered by interested parties, that constitutes the foundation on which rests the success of the whole vast tribe of Thompsonian, Botanical, Indian and other vegetable *doctors*" [9] (italics original).

What should the A.M.A. do? The Committee continued,

[7] Report of the A.M.A. Committee on Indigenous Medical Botany .(1848) p 334
[8] Report of A.M.A (1848) p 342
[9] Report of A.M.A (1848) p 334

"[...] a large proportion of regularly educated physicians are almost wholly ignorant of the plants, whether medicinal or non medicinal, which exist in their own immediate localities. We shall find no difficulty in perceiving how shrewd and designing men, ready and eager to take advantage of this ignorance, and claiming for themselves great and intuitive knowledge on the subject, succeed in imposing themselves on the credulity of their fellow men"[10].

Since, the committee reasoned, the population believed all apothecary medicine to be poisonous and all natural medicinal plants to be harmless, it concluded,

"[...] a thorough study of the general science of botany , with attention to medicinal botany, would enable every practitioner to recognise and understand indigenous medicinal agents of his own neighbourhood, correct the public mind and stop the progress of the various species of *vegetable* quackery, than any amount of penal enactments" [11] (italics original).

To this end the A.M.A. Botanical Committee of 1848 published a catalogue of medicinal plants compiled by S.W. Williams, Professor C.A. Lee and F.P. Porvher. Some of these plants, their characteristics and their medicinal affects, appeared in the Transactions of that year and allopaths were encouraged to familiarise themselves with the medicinal plants native to their own locales. By such "intellectual colonialism", allopaths sought to minimise the impact inflicted by their herbalist rivals[12]. This project was largely successful. Even though herbal medicine survived, it did so in the second half of the 19th century mainly as part of the eclectic movement in medicine and, of course, allopathy succeeded in limiting the damage to its own cognitive authority. The A.M.A's Medical Botany Committee openly confessed that not one instance could be found where a vegetable or Thompsonian doctor had succeeded in securing even a temporary foothold next to a "[...] regularly educated physician who was well versed in the medical botany of his own region"[13].

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[10] Report of A.M.A. (1848) p 342. Allopaths assinged themselves normative status here with the title "regular" physicians, a phrase used by contemporary historians. See chapter one of this thesis.
[11] Report of the A.M.A (1848) p 343.
[12] 'Intellectual colonialism' I use to mean the claim to sequestering of the ideas of one group by another rival group. I believe it is a concept implicit in both Berger and Luckmann (1966) and Witz (1992), especially p 47.
[13] Report of the Committee on Indigenous Medical Botany (1848) p 343

This process of nihilation adopted by allopaths, which had already begun by 1848, took on the same features that allopaths later used against homoeopaths. Though in the latter case allopaths were more effective in covering their tracks, a process greatly assisted by the Consultation Clause, the nihilation techniques used against both herbalists and homoeopaths bear striking similarities. As well as claiming to have superior knowledge of the practice of another group of therapists and better medical education allopaths incorporated knowledge of herbs into their own symbolic universe[14]. In fighting the new enemy of homoeopathy however, with its comparable medical educational base, 19th century allopaths were compelled to take their nihilistic techniques to new heights of sophistication.

Divergent Symbolic Universes- Homoeopathic and Allopathic Metaphysics at the Beginning of the 19th Century

During the first half of the 19th century allopaths and homoeopaths sat at opposite ends of the philosophical spectrum[15]. A major point of departure at this time was the *vis medicatrix naturae,* or "healing power of nature". Whereas the heroic system of allopaths derived from the Solidist teachings of the Scottish physicians William Cullen (1710-1790) and John Brown (1735-1788) and the American physician Benjamin Rush (1745-1813) emphasising medical intervention to overpower disease, homoeopaths claimed that cure could only be achieved by stimulating the body's natural ability to heal itself since it was the body's own powers of self repair which succeeded in curing, not the medicine.[16]. The *vis medicatrix naturae* operated at the level of theory for homoeopaths and within the allopathic Rational systemic medicine drawing upon mechanical and hydraulic analogies had no place. Benjamin Rush in 1811, for example, chided physicians for, " [...] an undue reliance on the powers of nature in curing disease [...]" since "The principle is devoid not only of intelligence,

[14] In the case of Thompsonianism, the superior education of allopaths over herbalists was undeniable, though in the Jacksonian era, more education was not necessarily seen as a good thing. In the case of homoeopaths however, allopaths could not legitimately claim superior education. Kaufman (1971) chapter two describes herbalism and Thompsonianism in more detail than I do here.

[15] Coulter deals with this in some detail regarding solidism, humouralism, and the doctrines of Rush and Brown etc See Coulter (1973) chapter 1for a fuller description of these medical systems.

[16] Solidists claimed that the physiological operations of the body could be understood according to analogy with mechanical, chemical and hydraulic processes. See Harris Coulter (1973) chapter one.

but possesses no healing power of any kind"[17]. Likewise, Nathaniel Chapman, successor to Rush at the University of Pennsylvania, commented in 1816 that the idea that "[...] fever will run its course and that all practitioners can do is abate its force is a dangerous one and should be combatted [...] it begets a feeble practice and suffers the disease to go on til it is beyond our power". In 1830 Chapman reiterated the feelings of insecurity the *vis medicatrix naturae* posed for some physicians when he said "Could I believe this opinion [the vital force] to be correct, I would at once without hesitation strike the flag of my profession, and cease to pilfer a generous public of their money by such a fraud and impostance"[18].

By contrast, Hahnemann had stated at the same time in the Organon "When man falls ill it is at first only this self- sustaining, spirit-like vital force [vital principle] everywhere present in the organism which is untuned by the dynamic influence of the hostile disease agent" and "[...] medicinal substances capable of acting on the organism exert their non material (dynamic) influence only on the spirit like vital force"[19]. However, Hahnemann was in agreement with Rush and Chapman in that he considered the vital force devoid of intelligence. Hahnemann claimed;

"However, the vital power, [...] is devoid of intelligence and judgment, and [...] cannot act of itself, but according to the organic disposition of our bodies, was not given to us that we should follow it as our best guide in the cure of diseases, much less that we should imitate, in a servile manner, its imperfect attempts to restore health by joining to it treatment more opposed than its own to the object it has in view"[20].

For Hahnemann, allopaths performed the latter, to the patient's ultimate detriment, claiming;

"Because it often happens in chronic diseases, that the evacuations which nature excites, bring relief in cases where there are acute pains, paralysis, spasms etc the old school imagined that the true method of curing disease was by favouring, keeping up, or even increasing the evacuations. But they never discovered that all those pretended

[17] Quoted in Coulter (1973) p 49
[18] Quoted in Warner (1997) pp 18-19
[19] Hahnemann (1810) p 15
[20] Hahneman (1848) p 50

crises, those evacuations and derivations, produced by nature abandoned to her own exertions, only procure palliative relief for a short period, and that, far from contributing towards a real cure, they on the contrary, aggravate the internal primitive evil, by consuming the strength and the juices" [21].

Hahnemann went on to explain at length how disease was dynamic rather than material and that, consequently, the drug used to remedy the malady should be equally dynamic, that is, dilute.

These alternative medical metaphysics were put to the test from the 1830s onwards when Europe and America experienced successive cholera epidemics. Operating under Hahnemann's direction homoeopaths around the world catalogued their results. Frederick F.H Quin (1799-1878), the prominent British homoeopath, reported a mortality rate of only 5% in 500 cases in Moravia, a place where allopaths reported a 50 % mortality rate. Similarly, the homoeopath Dr Sneider reported in 1832 a mortality rate of 21.1% in Russia, whilst allopaths achieved a rate of 74.19%. Even no treatment was superior to allopathy, the former producing a comparative mortality there of only 67.34%. In Vienna, homoeopaths reported a mortality of 8% and allopaths 31% whilst the London Homoeopathic Hospital (L.H.H.) in 1854 reported such superior mortality figures to parliament that the returns of the hospital were suppressed, (ultimately unsuccessfully), by allopaths[22]. Homoeopaths at the L.H.H. reported a mortality of 16.4% whilst allopathic hospitals in London experienced a mortality of 77 %. In 1900 Bradford reported '[...] [t]he aggregate statistics of results of allopathic treatment of cholera in Europe and America show a mortality of over 40%; statistics of homoeopathic treatment a mortality of less than 9 %' [23].

Allopaths made a first order response to such figures of ontological denial claiming cured homoeopathic patients were fictitious and not real cases of cholera but general gastro- intestinal disturbances. The L.H.H accordingly requested independent inspection of in 1854. The Medical Council eventually sent a medical inspector, Dr

[21] Hahnemann (1848) p 46
[22] See Squires (1985) p 381
[23] Bradford (1900). Thomas Lindsley Bradford (1847-1918) gained his degree from Harvard Medical School and the Homoeopathic Medical College of Pennsylvania in 1869.He joined the faculty of Hahnemann Medical College and became its library curator in 1894. He was author of several works, focusing mainly upon homoeopathy's history

MacLoughlin, to investigate. MacLoughlin was able to confirm both that the L.H.H. was dealing with genuine cases of cholera and that the hospital was at the very heart of the epidemic in St James', Westminster. In the U.S. homoeopaths responded to the accusation of fictitious patients by publishing patient names, addresses and testimonials in the public press.

One of the insights that emerged from the cholera epidemics generally, and from the statistical returns from the allopathic London hospitals in particular, was that eliminants, such as castor oil, were deleterious in cholera. Heroic medicine was on the wane anyway, being unpopular with patients, and reports such as these from the London Medical Board only accelerated heroic medicine's demise. The Board's Treatment Committee reported that mortality rates varied widely- eliminants produced a mortality rate of 71.7 %, stimulants 54%, alteratives (calomel and opium) 36.2% and astringents (chalk and opium) 20.3%. In short, treatment of cholera by eliminants was worse than no treatment at all, as 72 % was higher than most cases of the disease where no medicine was given. Consequently, allopaths argued that both the failure of their own treatment and the apparent successes of homoeopathy were explicable by the same phenomenon- the body's natural healing powers. Homoeopaths cured cholera because, unlike allopaths, they were allowing the body to heal itself, since prescribing homoeopathically with dilute doses was tantamount to doing nothing[24]. Allopaths on the other hand were preventing the operation of this principle by giving medicine when it was not needed. Hence, the *vis medicatrix naturae* along with the concept of self -limiting diseases gained wide currency in allopathic circles.

This allopathic defence represented a second order nihilation tactic since a concept became incorporated from homoeopathy to allopathy. Consequently Oliver Wendell Holmes could address the Massachusetts Medical Society in 1860 on the *virtues* of the healing power of nature[25]. Homoeopathy was thus credited by its enemies, to their

[24] This is in fact misleading since many were prescribing on the basis of similia alone in material doses. The price of *camphor* rose to 30 francs an ounce in Paris during the cholera epidemic there so that the government was forced to remove the import duties on it.. Thus, people were hardly diluting it!!! Coulter (1973) p 268.

[25] Though Holmes address was initially publicly disowned by the Massachusetts Society in 1860, Holmes as a significant allopathic physician could not be eternally ignored and eventually the vis medicatrix naturae gained wider currency in allopathic theory.

own advantage, with modifying allopathic practice and sounding the death knell of heroic therapy. Some scholars have drawn attention to this incorporation of the vital force into allopathic thinking as evidence of homoeopathy's influence on the medical world of the 19th century. [26] However, I believe these historians do not appreciate the full significance of this its translation.[27] I argue, more strongly than Warner and Coulter, that allopathy's adoption of the vital force into its own symbolic universe was less a practical adaptation and more a *theoretical survival strategy* whereby the concept was subjected to significant modification in the translation process, a fact that has until now not been recognised.

As Berger and Luckmann point out, nihilation strategies as techniques of de legitimation have the affect of transforming the symbolic universe responsible for the nihilating. Furthermore, translation often means that the concept itself undergoes modification. In this instance, not only did the adoption of the vital force by allopaths change their knowledge base, but the concept itself became modified into a *benevolent* force [28]. Hahnemann had conceived of the vital force as being a dumb, brutish thing, which in illness required constant direction, it alone being *insufficient* to restore health. Hahnemann considered the vital force destructive, often the instrument of death, claiming "The vital force was given to us to sustain our life in harmony as long as we are healthy, not to heal itself when diseased, for if it possessed an ability so worthy of imitation it would never allow the organism to fall ill". Thus for Hahnemann the vital force was neither intelligent nor benevolent. Symptoms, for Hahnemann, were the language of the body, informing both the patient and the physician that intervention was required. Hahnemann explained "If such help is not forthcoming, it [the vital force] tries to save itself at all costs by increasing the

[26]Warner (1977) p 177. Also Coulter (1973) (n vi) p 173Coulter_(n vi) (1973) p 263 . Also (ibid) pp 250-257 Coulter lists three contributions homoeopathy made to allopathy in the 19th century: drugging, the vital force and provings on healthy humans (p 241). Warner (1997) similarly claims the premise of the vital force was shared among regular physicians "...that homoeopathic treatment was physiologically equivalent to therapeutic abstinence and therefore was tantamount to relying entirely on nature for cure." (p 20). Furthermore, some physicians believed "[...] clinical statistics purportedly showing homoeopathic successes both illustrated the power of the vis medicatrix naturae and suggested that regulars had been attributing to art much of what was due to nature." (p20).

[27]Holmes (1860). Quoted in Coulter (1973) pp 173-4. Also see Warner (1997) p 177

[28]The early 19th century Boston physician James Jackson, for example, believed the wisest management of a case was in "leaving the cure to nature", it being the physicians task to "guard against the obstacles which may hinder the method of Nature". Warner (1997) p 23.Jackson's advocacy of the vital force so early in the 19th century can be explained in part in terms of the influence of Parisian medicine on Boston physicians earlier than physicians elsewhere since many went to Paris for their training. It is also worthy of note that Boston came to be one of the strongest centres of homoeopathy in the U.S.

suffering and especially by violent evacuations, often at the cost of tremendous sacrifice, sometimes at the cost of life itself"[29]. Hence, Hahnemann's concept of the vital force embraced the idea of self- limiting diseases only to a minimal degree.

At the 1873 meeting of the A.M.A. President Thomas M Logan MD, demonstrated both the allopathic variant of the concept of the vital force and its incorporation into allopathy. "Science " he said, rejected all probabilities "[...] and in her researches after truth has found that a large number of acute diseases, occurring in previously sound persons, have a tendency to terminate in the restoration of health even though no drug has been given"[30]. Claiming that such explained homoeopathic cures he continued;

"[...] accumulated observations have established the fact that certain acute diseases run a definite course and end spontaneously at a certain period from their onset. Conclusions, therefore drawn from the formerly supposed indefinite duration of these diseases, as to the efficacy of drugs to cut short their duration, are thus proved to be founded on false premises, and consequently are not trustworthy. From these and similar advances in our knowledge, the physician of expanded mind, instead of being overwhelmed by the effect of such discoveries, or regarding them as sapping the foundation of his faith, looks abroad with a clearer vision, and embracing in the sweep of his glance all that has led up to and all that flows from, these revelations of science, comes to entertain a more restricted and more correct appreciation of the action of drugs"[31].

Demonstrating that he particularly had the "false premises" of homoeopathy in mind, the President continued, "It is precisely on such garbled interpretations of what science has ascertained, that empirics, mingling a crude smattering of knowledge with a cloudy mass of ignorance, have erected their crazy structures of *infinitesimal* nonsense"[32] (italics added).

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[29] Hahnemann (1810) p 25
[30] Logan (1873) p 81
[31] Logan (1873) p 81
[32] Logan (1873) p 82

Hence, for allopaths, homoeopaths and the public were negators and did not really know what they were saying, making "faulty interpretations". Only could allopathy correctly explain the apparent successes of homoeopathy and the true nature of the vital force. As Berger and Luckmann put it "His [the homoeopath's] statements become meaningful only as they are translated into more correct [allopathic] terms, that is, terms deriving from the universe he negates"[33]. For allopaths, the only legitimate arbiter of *all* medical data was the "scientific physician" who was capable of rejecting "[...] the hostility conceived and immature speculations of the self-satisfied empirics [whilst simultaneously engaged in] the judicious employment of the rational means at his command [...] pure air, food and stimulants included, [to save] the patient from death."[34]. Even pathology and physiology were subsumed to the professional judgement of the allopathic physician. Logan claimed in a footnote that;

"Pathology and physiology afford little or no assistance in the adaptation of medicinal agents to particular diseases, no explanation as to the mode of their operation, e.g. bark in the case of ague. There is no means yet of informing us whether its operation is to neutralise the morbific miasm or merely to protect the body against its further noxious influence, while Nature's resources repair the injury done" [35].

These differing conceptions of the vital force between allopaths and homoeopaths led to different conceptions of the role of the physician[36]. Whereas allopaths used drugs in a limited way to *support* the natural operation of the vital force and ameliorate symptoms in the meantime, the homoeopath used drugs to *direct* the vital force against its "natural inclination", to *actively* cure the patient. Thus, by mid century and with the advent of the "expectant era" the allopathic physician credited the vital force with an innate capacity and "intelligence" that the homoeopath denied[37].

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[33] Berger and Luckmann (1966) p 133
[34]Logan (1873) p 83
[35] Logan (1873) p 83
[36] This remained the case until the advent of serum therapy.
[37] The so-called "expectant era" was dominated by the work of the Parisian School of Clinical Medicine and the likes of Pierre Louis (1787-1872) who used statistics to show the efficacy, or not, of treatments. By this means Louis showed that many heroic therapies were actually deleterious in disease, his most famous discovery being the negative effects of bleeding in pneumonia.

Furthermore, allopaths sought pluralistic rather than unitarian explanations. They did not share the homoeopathic objective of synthesis. In the previous quote, *bark* was accepted as a medicinal agent even though allopaths remained undecided as to its *modus operandi*; did the drug keep the disease at bay whilst the vital force healed or did the drug actively destroy the morbific agent? But this uncertainty did not seem to matter to them. Unlike homoeopaths who were attempting to explain the operation of the minimum dose according to various physical chemistry theories, allopaths ventured few explanations in the 1870s and 80s and yet did not interpret such a lack of explanatory power negatively, or in terms of "mere empiricism". In their appeal to Rationalism Allopaths continued to be adept at permitting contradiction, tolerating inconsistency and negotiating uncertainty.

Allopathic expediency permitted extension of the concept of the vital force even to chronic diseases. In 1877 J.R. Black, concerned with the transmission of "hereditary modification", suggested a relationship between racial degeneration and heredity[38]. Black pointed out that pre-pubescent children weakened by malnutrition, poor hygiene and overwork would, in their turn, produce weakened offspring. In this discussion of chronic health states Black referred to the action of the vital force as "reversion". This was an area where the physicians' skill was most needed, Black claimed, since;

" [...] the period at which organic evolution is the most active extends from the coalescence of the germ cells to adult life. Especially through the process of reproduction does the saving principle of reversion, or the tendency of all organic forms to fall back upon ancient ancestral and normal types, seem the most active"[39].

By hygiene, Black considered, could Man modify the structure and function of the body. When such modification became stamped upon the organism, as it did, by molecular change it acquired a transmissable quality, giving rise to a variation more or less permanent to the blood. However, the "[...] modifying force [...] must act

[38] Black (1877)
[39] Black (1877) p 464

upon the organism from within, or through the vital energies"[40]. It is this process that the physician must support Black claimed, since the;

"[...] struggle between the influences of unfavourable conditions and the tendency to reversion is what constitutes disease-either in an acute form , *or in some slow dyscrasia*, the ill omened factor in the phenomenon of hereditary descent, [since] change in the environment can modify dyscracia just as is done in acute illness" (italics added).

Black further reminded delegates "The tendency to reversion from acute disease is an everyday affair [in that] the vital force is seen to triumph and revert into its old state and play of function, as if it had never nearly perished"[41]. Black was thus extending the action of the vital force principle beyond acute disease by claiming reversion, or the principle whereby the vital force restored health, occurred in the chronic *predisposition* to a disease. Hence, the physician's role was both preventive and curative.

Homoeopathic and Allopathic Explanations- Tales of Narnia vs Scientific Scrutiny.

As I have outlined in chapters two and three, American homoeopaths in the 1870s were concerned with explanations of their own experimental data based upon the principles of molecular vibration and the nature of matter. They concerned themselves with chemical and microscopical analyses of dilute drug substances whilst invoking the principles of both vitalism and physical chemistry to explain drug action. At the same time their methodology for establishing the action of drugs was experimentally rooted in provings and in Britain in particular emphasised experimental physiology. Allopathic explanations of their own practices were, by contrast tentative and general whilst their explanations of homeopathic practice were specific and authoritative. Allopaths' medical epistemology was, not experimentally based, as was that of homoeopaths, but combined Rationalism, physiological discoveries and romantic anecdotes, with the individual physician remaining the final adjudicator on therapeutic issues.

[40] Black (1877) p 469
[41] Black (1877) p 473

A discussion of the properties of *arsenic* at the 1875 meeting of the A.M.A displays these explanatory strategies well[42]. J Marion Sims told the Association that the physician had the right to determine the dose of *arsenic*, or any drug, based upon the "individual experience of every gentleman", stressing this was especially the case in the use of small drug doses[43]. Dose, like the manner of medical intervention, was a matter of judgement on the part of the individual physician rather than the result of the application of a set of rules formulated by the profession.

Remaining with the medicinal efficacy of *arsenic* an Iowan physician cited as evidence that "[...] we are told that horsemen are in the habit of giving it to their horses, especially in the Alpine regions, in those mountain ranges where the air is rare"[44]. From this the speaker concluded that though this was evidence that *arsenic* reacted in some way, direct evidence was needed and the means by which it acted awaited discovery. Dr Wilters claimed it was simply a practical matter and one, again, left to the individual judgement of the physician until "[...] we have had experiences more certain" [45].

One physician suggested evidence was needed from physiology that *arsenic* diminished the calibre of the blood vessels. The Syrian experience of Dr Lendes was then recalled as evidence of the benefits of *arsenic*. His meetings with hunters and burden carriers from that region who experienced the harshness of the elements were in the habit of taking large amounts of arsenic, five to ten grains several days apart. These apparently experienced no inconvenience. Indeed, it was claimed the action of *arsenic* improved the respiratory organs so that the men's ages ranged from 80-84 years, some of them having habitually taken arsenic for 50 years[46].

The ad hoc nature of allopathic reasoning in this instance was also characteristic of the discussion surrounding cholera that followed the arsenical considerations. Dr Rogers cited one clinical case where a child recovered from the disease with *creosote*,

[42] Sims (1875)
[43] Sims (1875) p 145
[44] Sims (1875) p 144
[45] Sims (1875) p145
[46] No wonder they were nomads as arsenic produces "tremendous restlessness"!!!Vermeulen (1992) p 42

though the remedy was otherwise unsuccessful. Dr Caldwell agreed cholera was difficult to cure, claiming that lack of success among allopaths probably stemmed from their not getting the patient early enough. Dr. Ulrich interpolated "We get our facts, we classify them, we consider them and publish them [...]" and then relayed anecdotal "evidence" from Dr. Foster of Tenessee, which thereby demonstrated the "catching" nature of cholera[47]. Dr. Rogers on the other hand was arguing the case for cholera to be considered a neurosis. In these discussions, allopaths effortlessly juxtaposed explanatory styles, physiological, bedside, statistical and anecdotal data, not prioritising one over another. Indeed, Joseph M Toner remained sceptical regarding the impact a collective allopathic project could have on medical advance when he claimed as A.M.A. President that "Medicine has always been more advanced through the fortunate discoveries of the few original observers than it has in centuries of adherence to dominant theories"[48].

Indeed, allopaths had a history of handling therapeutic disappointment well. Alfred Stille, as Chairman of the A.M.A. Committee on Medical Literature, noted as early as 1850 that, "Physicians [...] are often disappointed in the effect of the remedies they administer, the circumstances which influence these results are too numerous and the conclusions to be drawn from such failures too uncertain, in most instances, to authorise any positive deductions as to the qualities of the article employed"[49]. Nevertheless, Stille was of the opinion that the "daily experience" of physicians' disappointment in practice was due in part to the "very inferior quality" of many medicines rather than error on the part of the physician[50].

Reverse Drug Action And The Explanation That Never Was.

Homoeopaths, by contrast, were more rigid in their explanatory styles and less forgiving of their own failures. Leading members of the A.I.H. were concerned to establish proof of the action of dilute drugs on the human organism and on putting homoeopathy on a scientific footing. Though they brought to bear many theoretical insights to explain a range of diverse data, in this enterprise homoeopaths did not

[47] Sims (1875) p 155
[48] Toner (1874) p 77
[49] Stille (1850) p 292
[50] Stille (1850) p 291

concern themselves with explaining the successes of allopaths. Whilst they acknowledged palliation in medicine they did not attempt to explain allopaths' ability to palliate or cure according to their own worldview. This was in contrast to Hahnemann who had explained the various drug actions achieved by allopaths and other practitioners, claiming, and citing evidence for the fact that, all were ultimately deleterious.

Hahnemann in The Organon (1810) wrote:

"The physician of the old school rejoices when he has forcibly slowed the small rapid pulse of cachexia for several hours with the first dose of *Digitalis purpurea* . But this is the primary action of the drug, and soon the heart beats twice as fast as before. Repeated stronger doses are less and less effective and finally do not increase the pulse rate at all. Moreover in the *secondary action* the pulse becomes uncountable; sleep, appetite and strength wane and death is imminent, or else insanity" [51].

Hahnemann even explained the efficacy of hydrotherapy in homoeopathic terms. Cold water (54 degrees Fahrenheit) from mountain springs and deep wells applied locally affected "[...] an efficient *homoeopathic* local assistance for paralysed parts or such as are without sensation"[52] (italics original). Hahnemann directed that such water should be poured upon the affected parts for one to three minutes, or by douch baths over the whole body for one to five minutes, daily or more often, together with appropriate internal, antipsoric treatment, sufficient exercise in the open air and judicious diet. By contrast, the American homoeopath S.R. Beckwith claimed forty-five years later "Every man who has used a mustard plaster knows that it relieves, and sometimes cures his patient; but it certainly does not operate by the principle of the homoeopathic law"[53].

Furthermore, Hahnemann reviewed in detail the (often inadvertent) use of homoeopathy throughout medical history, citing many instances where the principle of the reverse action of drugs showed that allopathic and homoeopathic practice

[51] Hahnemann (1810) p 57
[52] Hahnemann (1828) (2001) p 141 ftn.
[53] McGeorge (1875) p 317

operated along a continuum of medical practice. Hahnemann quoted Rucker as noting the ability of *solanum nigrum* to produce swelling of the entire body and the corresponding use of the same substance by Gatacker and Cirillo in the (homoeopathic) cure of a species of dropsy. Similarly, Hahnemann noted that Mayer Abramson administered *hyosyciamus* to a man who had become deranged through jealousy, which cured him speedily. *Hyosciamus* could cure jealousy because it could cause it. A strong infusion of tea was known to produce anxiety and palpitation in those not accustomed to drinking it, whereas in small doses it was well known as an excellent remedy against anxiety. Such, Hahnemann noted, was testified to by the well known physician G L Rau. Thus, Hahnemann used historical examples and instances of the medical practice of his day, to demonstrate that drugs had a primary and secondary action. Crucially, he used this dialectical relationship to nihilate allopathic claims to therapeutic efficacy.

In 1879 George Ockford of Vermont called for more work to be done on the antagonistic or reverse action of drugs, but this was in order to clarify much of the materia medica rather than explain allopathic effects in homoeopathic terms[54]. Ockford noted that it had long been acknowledged by prominent members of the homoeopathic profession that drugs elicited both primary and secondary symptoms, such a reverse action being used to account for many of the so- called "contradictory symptoms" appearing in the homoeopathic materia medica. Ockford noted that even, "The old school of medicine has long recognised a difference of action in large and small medicinal doses of drugs"[55]. Nevertheless, this doctrine had fallen into relative disrepute among allopaths so that there existed conceptual space for homoeopaths to adopt the principle of reverse action as their own. In noting that allopaths had begun to prove drugs according to the homoeopathic method, the M.H.R.of 1876 drew the profession's attention to the lack of attention to the "double" or "reverse" action of drugs. The Review noted allopathy was;

"[...] exclusively directed to the observation of the effects of full or physiological doses, and even though the opposite set of facts may be elucidated in the course of the experiments, their value is not perceived, and they are passed by without comment.

[54] Ockford (1879) p 177
[55] Ockford (1879) p 177

The effect of this mode of procedure is to bring out many facts which are of little practical interest from an allopathic point of view, and which are only utilized to the extent of pointing out certain results which are to be avoided in treatment"[56].

Indeed, allopaths acknowledged their agnosticism regarding reverse drug action, N.S Davis of Illinois, claiming they "[...] neither condemned nor affirmed the opinion that some medicines produce opposite effects according to the dose administered, but simply stated the fact that certain medicines were claimed to possess such power [and that] we are not aware that anybody has determined positively whether such assumptions are true or not and such statements were instanced [in a previous article] as apparent inconsistencies and illustrative of the vagueness of our ideas concerning the action of medicines" [57].

The 1870s thus produced for homoeopaths the opportunity to colonise the idea of reverse drug action and a potential second order nihilating tactic. It was an opportunity for them to explain allopathic successes in homoeopathic terms, to theoretically delegitimate them. It is particularly easy to imagine this possibility when it is recalled that homoeopaths considered knowledge of pathological and physiological drug action to be essential to homoeopathic therapeutics. Homoeopaths considered there to be no qualitative difference between material and dynamic prescribing, these existing commensurably along a continuum of therapeutic action. Put simply, homoeopaths in the 1870s could have explained allopathic successes as temporary palliation of symptoms by the primary action of a material dose, as Hahnemann had done.

However, whilst the secondary drug effect was lost on allopathic reasoning, the primary drug effect appeared lost on homoeopathic reasoning. Homoeopaths recognised the value of allopathic material provings for homoeopathic uses, but they failed to use the reverse action of drugs as an explanation of allopathy's failure to cure and in doing so did not bring allopathic therapeutic effects into their own universe of meaning. Potentially even more damaging was the fact that later on in the century, homoeopaths did acknowledge their own use of some allopathic remedies and yet did

[56] Monthly Homoeopathic Review April 1st (1876) p 198
[57] Davis (1874) p 101

not explain their operation in their homoeopathic terms (*creosote* in tuberculosis, for example).

It is as though homoeopaths were unable to acknowledge allopathic successes of any kind on any level. In short, it appears homoeopaths never moved beyond the first order nihilative strategy of ontological denial to using more sophisticated machinery especially translation. Allopaths, on the other hand, had been forced to grapple with homoeopathy's continued popularity, beginning in earnest with the mid 19th century cholera epidemics. Allopaths thus performed first and second order nihilation, whereas homoeopaths performed only the first, denying allopathic success any ontological status. Put another way, allopaths incorporated homoeopathic *theory and practice* into their universe of meaning, whereas homoeopaths incorporated select allopathic *practice*. Homoeopaths failed to nihilate allopathic practice by explaining it in homoeopathic terms. The incorporation of allopathic practice *alone* into the homoeopathic universe of meaning represented a weak nihilative attempt and ultimately contributed to the undermining of homoeopaths' cognitive authority.

By the turn of the century the situation had worsened for homoeopathy. American homoeopaths in particular began what amounted to conceptual suicide by relativising therapeutic approaches. Rather than expanding, the homoeopathic symbolic universe was contracting, with Eldridge C Price outlining to the Institute in 1898 the respective therapeutic spheres of the "four pathies"; Antipathy, Allopathy, Isopathy and Homoeopathy[58]. Price began by admitting that few homoeopaths at that time were exclusivists but had outgrown sectarianism, being simply physicians "[...] who reserve the right to draw from every field of mental achievement that which will aid in the healing of the sick, whether these contributions are from mechanics, from chemistry, from bacteriology or from the charmed circle of Homoeopathy"[59]. Science had thus become equated with eclecticism. "We believe in allopathy, in antipathy, and in Homoeopathy" he continued "each in its own place, and with a scientific reason for our beliefs, and we want the world to know it"[60]. Allopaths, as well as American philanthropists and medical educators betrayed the same viewpoint when they

[58] Price (1898)
[59] Price (1898) p 105
[60] Price (1898) p105

claimed science had taken what was useful from sectarian medicine and discarded the rest.

The homoeopath J.S. Mitchell explained antipathy, rather than allopathy, in terms of the reverse action of drugs, defining antipathy as "[...] affections or symptoms indicating morbid states [...] cured by remedies inducing opposite symptoms or affections"[61]. It was not a huge leap from there, Mitchell believed, to determine;

"[...] that if a medicinal effect contrary to the symptoms of the malady, viz; antipathic treatment, only procured momentary relief, at the expiration of which the evil constantly grows worse, by the same rule the reverse method, that is in the homoeopathic application of medicines administered according to the analogy existing between the symptoms they excite and those of the disease itself, must necessarily bring about a perfect and permanent cure"[62].

Evidence of the translation of homoeopathic principles into the allopathic worldview is provided by the homoeopath W. H. Geohegan who claimed in 1898, "The dominant school of physicians justly repudiate the term allopathic. The drugs chosen by their methods do not always bear the allopathic relationship; in fact, the use of similars abounds in their practice. This has been openly admitted, of recent years, by some of their leading authorities"[63]. The prominent allopath H C Wood was quoted as having recognised that similia similibus curentur had survived for two thousand three hundred years, thus, "[...] it must possess some peculiar vitality, some measure of truth, and I myself believe that, as a rule of practice, it will at times lead to a good result"[64]. Disastrously, many homoeopaths concurred with this circumscribed view of similia's action. Geohegan himself continued that it "[...] was necessary to ascertain the proper limitation of the sphere within which the law of Similia is applicable [...]"[65] whilst Price went further, asking "What if, in following truth, we are led away from Homoeopathy? It matters not." Subsuming the law of similia under the possibility of greater truths Price claimed "We will only be drawing nearer to the fact,

[61] Price (1898) p 110
[62] Price (1898) p 112
[63] Price (1898) p 122
[64] Price (1898) p 122
[65] Price (1898) p 124

to the roots of the universe, to that which is the *cause* of the law of similars"(italics added)[66]. Thus, the belief was that the homoeopathic law of similia would be subsumed under some other, greater law, rather than vice versa. Price and his fellow homoeopaths evidently believed that homoeopathy represented only partial truth. The homoeopathic symbolic universe of meaning had shrunk considerably.

Thus, 19th century homoeopaths failed to use the principle of the reverse action of drugs to explain allopathic therapeutic effects and successes at a contingent point in history. Whilst they did allude to the allopathic use of homoeopathic small doses and, later in the century, even pointed to instances of allopathic use of the principle of similia, homoeopaths failed to explain the action of material doses in the theoretical and linguistic terms of their own symbolic universe. In their universalising project they attempted to incorporate all data their experiments and clinical observations generated but they failed to explain, incorporate and translate the concepts and activities of their rival. Subsequently, they became subsumed into the worldview of that rival.

Indeed, rather than explaining the successes of allopathy and antipathy in homoeopathic terms, Mitchell explained all three in terms of William Bayes theory of specific restorative medicines again giving them all equal, or near equal, status and Geohegan admitted that where homoeopathy failed to act, allopathic methods could legitimately be used, though in general allopathy was deleterious[67]. Vaccination may have its virtues, several physicians claimed, but isopathy, its first cousin, was dangerous and certainly not synonymous with homoeopathy. The general tenor of the discussion was to elaborate differences between the various therapeutic approaches rather than any attempt to synthesise them under the homoeopathic banner.

By the beginning of the 20th century Allopaths began to incorporate the reverse action of drugs into their own explanatory framework framing the laws of contraries and similars in terms, not of antithetical opposition, but as existing along a continuum. Huchard wrote in the early 1900s " We must know and admit that all medicaments

[66] Price (1898) p 106
[67] Price (1898) p 113

possess two actions: a primary and a second one, the latter opposite to the former"[68]. Francois Cartier, homoeopathic physician to the Hospital St. Jaques of Paris, claimed in the early decades of the 20th century, that this principle of opposite action was no longer disputed, the law of contraries and the law of similars being the two cardinal points of therapeutics. Indeed, Cartier claimed bacteriology had explained the law of similars indisputably, showing that "In the disease itself is found the remedy for the disease"[69]. Since the "[...] pathogenic microbe [is] always the starting point of the therapeutic agent"[70] The problem was that neither of these were considered the province of the homoeopathic symbolic universe, not even by homoeopaths[71].

Homoeopaths' indifference to explaining the clinical results of their competitors was lamented in 1905 by Benjamin F Bailey:

"Contented in our own sufficiency" he told the Institute "we were unwilling to grant or recognise any accomplishment the result of scientific studies that might have been made by the regular school in the last twenty- five years, and we were inclined to change positions and to cry out against every new discovery - not on account of its negative evidence but on account of its origin. If it came from the regular school it must be false, it must be bad"[72].

Thus Bailey admitted that homoeopaths had not taken developments and discoveries within allopathy seriously. Homoeopaths assumed that because they saw them as illegitimate, based upon a set of false premises from a curative standpoint, that they did not merit explanation. Such was not the case and homoeopaths paid for their complacency. "We rested on our oars[...]" Bailey said[73]. The last quarter of the 19th century saw homoeopathy lose valuable intellectual ground to allopaths. It was a loss they would prove unable to recover.

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[68] Cartier (1989) p xiv-xv. Dr Francois Cartier was an authority of respiratory diseases and spoke at the International Homoeopatic Congress of 1896. At the 50th anniversary of the Royal Belgium Homoeopathic Society in 1920 Cartier, along with Tessiers of Lille offered to publish the works of the society in the French Homoeopathic Magazine, a practice which continued until 1936.
[69] Cartier (1989) p xvii
[70] Cartier (1989) p xvi
[71] Just as there is a lack of explanation of allopathic successes I have not been able to find evidence of homoeopaths explaining herbalism or the water cure etc even though Hahnemann alluded to the latter and gave it an explanation according to the law of similia.
[72] Bailey (1905) p 94.
[73] Bailey (1905) p 95.

Conclusion

This chapter has suggested that allopaths were successful in absorbing and neutralising conceptual threats to their symbolic universe, first in the form of herbalism and then homoeopathy. Since homoeopathy posed a greater and more long lasting threat than other deviant medical systems these neutralising techniques took two forms. After denying ontological status to homoeopathic cures, allopaths emphasised the self- limiting nature of acute diseases and consequently the power of the *vis medicatrix naturae*. This led to allopathy absorbing a specific and modified form of vitalism into its own practice, which remained until the early decades of the 20th century. This concept of the vital force, as I have shown, was also applied by allopaths to explaining the operation and cure of chronic disease through the concept of "reversion".

The nihilation strategies of allopathy extended far beyond the process of admitting homoeopathic drugs and doses into their own materia medica that historians have demonstrated[74]. In a sophisticated process of delegitimation allopaths translated the concepts of the vital force into their own universe of meaning, affecting legitimation at the theoretical level. Though homoeopaths did use allopathic data and incorporated some allopathic treatments and techniques, homoeopaths failed to nihilate allopathy at the theoretical level. They failed to explain allopathic successes and concepts in terms of their own theoretical framework, even when such an explanatory framework was available to them. Furthermore, they failed to highlight the important differences between their own and allopaths' conception of the vital force. Empirical incorporation without theoretical nihilation served only to legitimate allopathic practice further. Thus, it was not so much that homoeopathy could not explain its *own* successes, but that it did not explain those of its principal rival in homoeopathic terms. This was homoeopathy's "missing explanation". Homoeopaths used the reverse action of drugs to explain therapeutic effects of differential drug doses within *their own* practice. The concept's sphere of application was not extended to explain allopathic practice. This could have been achieved by consigning allopathy's sphere of

[74] Coulter (1973), for example.

competence to the one end of a therapeutic continuum - that of material drug doses- whilst homoeopathy's sphere of competence occupied all other points on the continuum, as in the table below:

Material drug doses	Low dilution drug doses	Medium dilution drug doses	High dilution drug doses
Allopathy	Homoeopathic 6c and 4 x	Homoeopathic 30c and 200c	Homoeopathic 1m, 10m , 50m, Infinitesimals
Physiological Effects	Different Body Tissues and Organs		Mental/Emotional Effects

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Figure 5 Spheres of Action of Differential Drug Doses.

In the next chapter I will extend this analysis in a case study of the homoeopathic and allopathic treatment of tuberculosis. I argue that, not only did allopaths come to colonise the concept of the *vis medicatrix naturae*, but in the context of tuberculosis it can be seen that they had adopted the principles of similia and the minimum dose. Allopaths maintained their medical identity by mediating this translation through the language of bacteriology. By the beginning of the 20th century allopaths and homoeopaths were treating tuberculosis in almost identical ways but talking about what they were doing completely differently. I will thus show, contra Warner, that language, not practice, constructs medical identity and circumscribes what is cognitively possible and practically acceptable[75].

[75] Warner (1997)

Chapter Five

Talking Therapy: The Allopathic Nihilation of Homoeopathy Through a New Language[1]

In November 1836 Jonathan Smith Jnr., a consumptive New Hampshire lawyer, sailed from New York to St Croix in search of a cure for his condition. Describing the beginning of his voyage one of his early diary entries reads,

> "I never had my sensitivities to the beauties of nature so strongly excited before...At first the motion of the vessel was fearful through the waves. Every sail was set and she moved swiftly though the water. As she channelled into the trough of the sea, she seemed to be going to the bottom, for the waves broke over the stern and came more than half way to the stern- but she rose again majestically to the summit. Our course was south east – against the rising sun- and the appearance of the sea as the vessel rose was splendid beyond anything I ever witnessed". [2]

Consciously or not, Smith's diary entry captured beautifully in metaphor the horrors of tuberculosis. The restlessness of the sea, paralleling the insomnia and debilitating night sweats of the disease, the almost "going to the bottom" and rising again its relapsing and unpredictable nature, the power of the waves the consuming capacity of its full onslaught. Smith was certainly aware of his heightened sensitivity to his surroundings, betraying the increased romanticism typical of the tubercular diathesis.

And yet tuberculosis was anything but romantic. Unlike the epidemic diseases of the 19th century, which, once they had wrought their destruction, temporarily or permanently passed off the scene, tuberculosis was a 19th century constant [3]. Epidemiologically, it defined the

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[1] It will be remembered that "Nihilation " is defined in Chapter four.
[2] Rothman (1994) p 36.
[3] Leprosy, for example, decimated medieval Britain but disappeared in the 14th century, perhaps spontaneously, or perhaps because of the Black Death or Tuberculosis. See Porter (1997) pp 122-127

century[4]. William Owens an allopathic physician of Ohio, U.S.A. noted in 1886 that one quarter of the human family was afflicted with scrofulosis (tuberculosis of the lymph glands). Likewise, in 1873 the Lancet reported that death from consumption in the U.K. still represented one tenth of the aggregate mortality for the whole population and that this was a marked improvement on earlier in the century[5]. During the first half of the 19th century in the United States consumption, or tuberculosis of the lungs, was considered responsible for one in every five deaths. For most of the 19th century the "climate cure" sought by Smith was one of the principal treatments for tuberculosis. The diverse nature and unpredictable course of the disease meant controversy among physicians continued from the 19th century well into the 20th century. Was tuberculosis one disease or several? Was it the same as scrofula? Was it an acute or chronic disease? Did the "laws" of inheritance or bacteriology explain every instance of the disease? Was it a disease of childhood or venereal in origin? Was it *curable?*

In their conflict with homoeopaths over these issues during the second half of the 19th century allopaths used both first and second order nihilative strategies. I outlined in chapter four a second order nihilative strategy deployed against homoeopaths in relation to cholera and the vital force. This chapter will focus upon the allopathic translation of the similimum and the minimum dose into allopathic practice. Using tuberculosis as a case study I suggest that allopaths choreographed and legitimated this nihilative move principally through the language of bacteriology. I argue that in their use of "vaccine therapy" in tuberculosis allopaths had by the early 1900s absorbed the two most pivotal homoeopathic *theoretical* tenets they had a generation before vilified- the law of similars and the minimum dose. This nihilation of homoeopathy at the second order and theoretical level led to the latter's loss of cognitive authority or delegitimation (even in its own ranks) as it gave allopaths the linguistic apparatus to both do and explain what homoeopaths were already doing, but in their own, allopathic, terms. In the course of this incorporation and translation allopathy itself was transformed. At the same time homoeopaths came to see Koch's artificially manufactured

[4] Catherine Coulter has pointed out how, taking an impressionistic approach, each historical era can be seen to have its own homoeopathic gestalt. The Middle Ages, with its high scholasticism was Sulphur, the Renaissance with its versatile exploration of knowledge Lachesis (snake venom) and Nux Vomica. The 20th century with its High Romanticism and liberation of the emotions was *tuberculinum.* The post- war disappointment of the 20th century precipitated a *natrum muriaticum* era, whereas the late 20th century with its disconnectedness, alienation and fragmented identities, as the era of nuclear energy and mass vaccination, is most definitely *thuja.* See Catherine Coulter (2002).

[5] The Lancet Sept 6th (1873) p 346.

tuberculin as useful to them both as a therapy and as a means of legitimating their own theory and practice.

In demonstrating that homoeopaths and allopaths treated tuberculosis in similar ways but talked about what they were doing in completely different ways, I argue that medical language is underdetermined by both medical theory and practice, that is, the same knowledge and practices can be linguistically represented in different ways[6]. Indeed, the functional role of language makes changes in power relations between different social and professional groups visible. The underdetermination of language thesis also permits the optimistic philosophical position that translation and commensurability between different symbolic universes is possible[7]. In Hegelian terms, synthesis can be achieved. It should thus be noted that the argument presented in this chapter goes beyond the "convergence" thesis suggested by some historians[8]. I argue here that allopaths practiced "intellectual colonisation". They did not simply share these concepts with homoeopaths, but in renaming and redefining them became the custodians of these concepts. This second order nihilative technique was ultimately at the expense of the homoeopathic universe of meaning.

To be sure, linguistic divergence can be symptomatic of actual differences in theory and practice between different social groups. However, language can also mask similarities and I believe this is what is happening here. Scholars in the history of medicine have mistaken linguistic differences between the two groups of physicians for actual theoretical and practical differences in this instance because they have neglected the clinical history of homoeopathy. Only by returning to both allopathic and homoeopathic archives and looking at what allopaths and homoeopaths *actually did*, rather than just at what they *said*, can the role of language in this nihilation strategy become apparent. Of course, historians have noted rhetoric in 19th century medicine but this is often limited to the pejorative use of "Rationalist"

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[6] Lawrason Brown listed drugs known in 1700 which continued in use by allopaths in 1941 in tuberculosis cases, namely, *turpentine, opium, peppermint, castor oil, sodium carbonate, calamine, ammonium chloride, zinc oxide camphor, senna leaves, nux vomica, ammonium carbonate, calamel, belladonna, ipecac, balsam peru, hydrochloric acid, ammonium acetate, Rochelle salts, Epsom salts* and *quinine* See Ott (1996) p 189 ftn 92.

[7] Berger and Luckmann (1966) pp 110-46

[8] Coulter (1973) and Nicholls (1988) particularly see the adoption of some more materialist approaches to medicine as the "bastardisation" of homoeopathy. I explain the process of liquidation in chapter four. Coulter (1973) does, of course, describe the absorption of specific homoeopathic medicines into allopathic practice. But he describes this as a process of allopaths simply culling what was useful from the homoeopathic literature. My thesis goes further and claims allopaths succeeded in colonisation homoeopathic knowledge as a result of the nihilation strategies of allopaths

and "empiricist" by physicians[9]. Here, I extend such analysis to *medical theories and explanations*. I argue that, among physicians, American homoeopaths were the most scientifically engaged in that they challenged, not just the therapeutic implications of Koch's findings, but his science as well[10]. But, before analysing allopathic nihilative moves toward homoeopathy in tuberculosis treatment their earlier therapeutic and theoretical differences must be reviewed.

Differences in Approach to Tuberculosis Between Allopaths and Homoeopaths in the 1870s and 1880s

By the 1870s allopaths had come to minimise their use of drugs and in the more expectant emphasised the prevention of tuberculosis rather than its cure, which proved elusive. Consequently allopaths emphasised environmental factors, especially dietary and meteorological conditions. It was believed a dry, warm environment and a diet rich in eggs, milk and meat could often offset the emaciation characteristic (and some allopaths considered, causative) of the disease. At the same time the constitution of the individual, both inherited and acquired, was believed to play an important part. Indeed, some believed until quite late in the century that the disease could be inherited. Whilst drugs were in use by allopaths, these were considered to act locally and often to merely palliate the patient, or make them more comfortable. Though acknowledging the operation of the *vis medicatrix naturae* after the cholera epidemics of the 1850s, they did not generally consider drugs to be able to act upon the vital force or constitution in a curative way.

Medical journals reveal that allopathic physicians were much more concerned than homoeopaths with the "real" nature of tuberculosis, its aetiology, how it could be distinguished from other diseases and its prognosis (its course of development). Hence their approach was still Rational. Most allopathic articles dealt with the pathological and physiological processes of the disease and of post- mortem examinations results. This was still the age of the lesion. Very little journal space was devoted to treatment and only a small proportion of that referred to drugs. By far the majority of treatment recommendations focused upon fresh air, hygiene, nutritional supplements and, above all, prevention

[9] See in particular Warner (1997) on the rhetorical use of "empiricism" and "rationalism" by physicians.
[10] The four groups being allopaths and homoeopaths in Britain and America

Like allopaths, homoeopaths in the 1870s advocated the constitutional nature of tuberculosis, and sometimes referred to this also as "scrofulosis". Many homoeopaths believed that without this constitutional weakness tuberculosis could not take root even if the disease was infectious in origin, which many American homoeopaths in particular doubted. Like allopaths, homoeopaths considered the constitution to be determined by both heredity and environment, hence fresh air, good nutrition and tonics were also recommended[11]. Findings in pathology, physiology and morbid anatomy were all used to describe the progression of the disease and to explain the probable operation of the homoeopathic remedy. Morbid anatomy especially was gleaned from non - homoeopathic sources since most homoeopaths were in general practice, especially in the U.K., and found hospital appointments not open to them[12].

The main difference between homoeopaths and allopaths at this time was, unsurprisingly, in their use of drugs. Whilst homeopaths used a wider range of drugs than allopaths and selection was made on a different basis, according to similia rather than contraria, some overlap has to be acknowledged. For instance, homoeopaths and allopaths alike used *ferrum* (iron, in muriate tincture), *plumbum* (lead), *cuprum* (copper), *opium,* the *arsenics*, *iodides* and *calcium*. But whereas allopaths prescribed drugs in 10, 20, or 30-grain doses i.e. in "material" quantities, homoeopaths generally used drugs that were diluted, either in water or water and alcohol[13]. Where homoeopaths did use material doses, they did so in much smaller quantities, the recommended dosage often being between a quarter and one grain[14].

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[11] For a long time I was of the opinion that homoeopaths used alcohol only in the preservation of their liquid medicine preparations. However, I recently found that Dr.Burford, consultant gynaecologist at the London Homoeopathic Hospital gave to one Rose Lewis on September 13th 1895 brandy, along with homoeopathic remedies, for the correction of retroversion and flexion uteri. These are found in Dr Burford's case books stored at the London Metropolitan Archive.

[12] See Weatherall (1996) for how homoeopaths were excluded from institutional positions in Britain in the mid 1800s.

[13] What was considered a material dose was debatable. James Compton Burnett implied a 30C could be considered material in that a 100C often avoided the undesirable constitutional disturbance often experienced in tuberculosis treatment. This was borne out by Avogrado who claimed any substance diluted beyond 10-24 (10 to the minus 24) could have no original molecules left in it. This corresponds to the 24x or 12 c in homoeopathic dilutions. Finally, Conrad Wesselhoeft in the US in 1878 experimented with triturated metals and concluded after microscopic examination "It is certain that matter is not present beyond the fifth [dilution], as any one who may will see for himself." American Institute of Homoeopathy Transactions (1879) p 227 (emphasis original)

[14] Boericke (1927), for example, recommended only 1 grain of *opium*, which he dubbed the "official" and "crude" dose. *Opium* was used in cases of complete unconsciousness, frightful delirium, great pain, sleeplessness, fever with stupor, suppressed menses from fright and other conditions. The recommended dose for *laudanum* was 1/4 to 1 grain. Polypharmacistic preparations, such as Dove's powder, however, were recommended in higher doses being made up of only 10 % *opium* and *ipecac* (the rest being *sulphate of potash*). The dose recommended here was between 5 and 15 grains. Likewise, *Magendie's* solution was recommended as

At this time then, homoeopaths and allopaths used both drugs and hygienic measures in the treatment of tuberculosis, but each group placed a different emphasis on their respective roles. Homoeopaths used hygiene to support the action of the constitutionally acting drug, whereas allopaths used drugs to support the constitutional action of hygienic measures. For allopaths, drugs acted locally, for homoeopaths they acted constitutionally, or holistically. For allopaths *the environment was curative*, supporting the vital force in its action, with drugs removing the unpleasant symptoms of tuberculosis. For homoeopaths *drugs were curative,* acting directly on the vital force to give it direction, with the environment *facilitating* the operation of the similimum.

By the 1870s then, individual constitution, drugs and the environment were all significant factors in the development and treatment of tuberculosis for both homoeopathic and allopathic practitioners, though these played a different role in the disease for each group. Moreover, the theoretical rationales of the two groups remained divergent. These differences were thrown into sharp relief with the response of each group to Robert Koch's (1843-1910) discovery of the tubercle bacillus in 1882

Responding to Koch's Discovery of the Tubercle Bacillus in 1882

As early as April 1882 the Lancet deemed Koch's discovery remarkable, claiming Koch had succeeded in demonstrating the tubercle bacillus was the cause and not simply the accompaniment of the disease[15]. The journal considered with caution, however, Koch's contention that every case of phthisis was the result of extraneous infection. The Lancet considered heredity of equal if not greater importance in the development of tuberculosis and the only explanation of cases with no previous exposure to tubercular individuals.

Koch's discovery of the bacillus met with a more muted response from the B.M.J. compared to the Lancet. Angus Fraser in the December 16th issue of that year questioned the causal nature of the tubercle bacillus. Fraser noted bacilli were found everywhere and Lister's process had been found to be incapable of preventing their appearance, as had once been

being administered in the proportion of 16 grains to 1 oz or 5 drops equal to 1/6 th of a grain. Pure drugs were then administered in much smaller doses than preparations.

[15] The Lancet April 22nd (1882)

supposed. Fraser thus considered the tubercle bacilli concomitant rather than causal in tuberculosis. Certainly the discovery of the tubercle bacillus was considered a useful diagnostic tool in doubtful cases, if nothing else. The June 17th issue of the B.M.J. in 1882 noted the examination of sputa in Berlin medical establishments being regularly employed as a way of distinguishing tuberculosis from other lung diseases. Nevertheless, to allopathic physicians of the 1880s Koch's discovery of the bacillus did not transform their understanding of the nature of tuberculosis or their treatment of it.

American allopaths were even less enthusiastic than their British counterparts to Koch's announcement the 1882 Transactions of the A.M.A. bringing no response from them to the discovery. Koch's announcement was not even acknowledged. The following year, however, the renamed and restructured Journal of the American Medical Association (J.A.M.A.) carried several articles from the Association's conference proceedings of 1883 addressing Koch's discovery[16]. Their criticism of Koch was directed more at his conclusions than the discovery itself. Like their British counterparts they did not deny the existence of the bacilli but questioned its etiological role. J.H. Hollister of Chicago Illinois complained sardonically that Koch had been, until recently an "[...] obscure physician in one of the country towns of Prussia. Today he is at the head of the Imperial German Health Laboratory in Berlin" and that in most cases attempts to separate the bacilli absolutely from other possible causes had been insufficient[17]. Hollister cautioned that the continuing debate regarding the supposed discovery of distinct bacilli for leprosy, typhoid fever and gonorrhoea undermined any hasty conclusion that tuberculosis was purely bacterial in origin. Failed attempts at propagating the germ associated with tubercular patients simply reinforced physicians' scepticism[18]. W.F. Peck from Iowa concluded, "That these peculiar micro-germs exist there can no longer be any doubt. But whether they are the cause of the tubercle, or whether the tubercle develops them, the profession has not made sufficient progress as yet to justify an unequivocal statement"[19].

American homoeopaths on the other hand did doubt and were unequivocally anti-Koch in relation to both his science and its possible therapeutic implications. In the summer of 1882

[16] From 1883 onwards the Transactions of the American Medical Association (TAMA) became the Journal of the American Medical Association (JAMA)
[17] JAMA August 11th (1883) Vol 1 No 5 pp 66-7
[18] JAMA (1883) Vol 1 No 14 p 410.
[19] Transactions of the American Medical Association, August 11th (1883) p 129.

Rollen Gregg MD addressed the A.I.H. with " Professor Koch's Bacteria in Tubercles a Great Fallacy"[20]. In it he explained that what Koch had observed under the microscope was not tubercle bacilli at all but previously demonstrated coagulated fibrin, which always *succeeded* congestion and inflammation of organic tissue. Such fibrin was easily mistakable for bacteria, Gregg explained, since both were white, inhabited the same sites in the body, shared the same form and shape and behaved in the same manner. Since every tubercle had fibrin in a fluid state extravasated (seeping out) from the blood into and around it during the process of organisation, and since the fibrin there coagulated into granules and fibrils, Koch had readily misinterpreted this process as bacterial infiltration. The immediate cause for Gregg of the tubercle was deficient blood and not bacterial infection, the remote causes of deficient blood being complex in origin. As nothing more than the stagnation of fibrin, then, Koch's bacteriology should, Gregg concluded, be dismissed since it had created "[...] bugbears [physicians] know nothing of, or how to combat, and which only leaves them helpless, in the midst of doubts and fears, which have no foundation whatever in fact"[21].

Homoeopaths in the U.K. also gave no response to Koch's announcement in the homoeopathic journals until Koch's later announcement in 1890 of his "discovery" of *tuberculin.* Throughout the 1880s British homoeopaths in particular continued to concern themselves with the treatment of tuberculosis rather than its cause(s) and even on this subject few articles appeared until the 1890s. Such articles were published mainly in response to the pioneering work of the London based homoeopath James Compton-Burnett (1840-1901) who will be discussed in detail later.

Thus, physicians in general did not accept Koch's discovery unequivocally. American homoeopaths responded to Koch's announcement with instant cynicism and extreme criticism, not only challenging the implications of Koch's findings for physicians in a display of professional boundary reinforcement, but also directly challenging Koch's science. British homoeopaths, in their silence, did not appear to consider Koch's discovery particularly significant for the treatment of tuberculosis. Homoeopaths generally did not believe Koch had discovered the cause of tuberculosis since constitution was far more important and could be strengthened primarily through drugs. They did not believe Koch's discovery added

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The Journal of the American Medical Association (JAMA) was published weekly with coverage of conference papers being given regular front- page status.

[20] A.I.H. Transactions (1882) 35th session p 649-657

[21] A.I.H. Transactions (1882) p 657

anything to their therapeutic armamentarium. American allopaths on the other hand were slow to respond and, whilst accepting Koch's science, concentrated their challenge upon the lack of therapeutic implications of the discovery, though they recognised its implications for quarantine[22]. British allopaths considered the infectious nature of tuberculosis to be likely, but they did not consider it the complete etiological explanation. Whilst acknowledging the implications of the discovery for hygienic measures, quarantine, and diagnostic possibilities allopaths remained self- consciously bereft as far as internal antiseptics were concerned.

In all this then, it can be concluded that American homoeopaths were the most self confident in their response to Koch and British homoeopaths the least, the former displaying the strongest scientific identity, challenging Koch's science. Conversely, British homoeopaths had the least well-developed scientific identity of the four groups apparently failing to engage science of this kind, and certainly overlooking Koch's discovery[23]. Allopaths on both sides of the Atlantic were at best cautious as to the possible therapeutic implications of Koch's findings. At worst they considered Koch an upstart who had no idea about therapy.

Despite its general lukewarm reception from physicians, Koch's discovery of the tubercle bacillus and his subsequent production of *tuberculin* augmented the bacteriological project introduced by Pasteur and began the process of providing the theoretical rationale and linguistic apparatus for allopaths to nihilate homoeopathy. Koch announced his discovery of tuberculin in 1890, but before we consider the impact of this innovation we need to go back sixteen years to the experiments of a renegade New York homoeopath.

The Really Pivotal Date in the History of Tuberculosis Treatment-The 1874 Discovery of *Tuberculinum.*

In 1874 Samuel Swan (1814-1893), prepared a trituration of sputum taken from a tubercular cow. Swan called this preparation "*tuberculinum*". With fear and uncertainty surrounding tuberculosis Swan found volunteers willing to prove his new remedy few and far between, claiming in 1885; "I shall not urge the proving of morbific products. These powerful agents must be proved by those willing to sacrifice health and comfort, and though humanity will be

[22] Though some allopaths did question Koch's staining methodology. See the B.M.J.October (1882).
[23] For more information on how homoeopaths used pathology, physiology and pathological anatomy to direct their practice see my article 'Recovering Homoeopathic Science at the Turn of the 20th century: An Exercise in Tory Historiography.' in Wellcome History, February 2004.

the gainer, the services of the provers will not be appreciated, and there will be little sympathy for their sufferings"[24]. Perhaps it was the lack of provings of *tuberculinum* that contributed to the difficulty Swan experienced in gaining acceptance for his discovery, with "mainstream" homoeopaths labelling the preparation "unscientific". Furthermore, some considered Swan's preparation isopathic rather than homoeopathic, a substance capable of causing *identical* symptoms – tuberculosis itself -rather than simply *similar* symptoms. For some this was not true homoeopathy at all[25]. In any case Swan remained marginalized within the profession, and never lived to see the gradual acceptance of his discovery by the homoeopathic profession. He died at the age of 79 in 1893 as a result of an experimental proving on himself[26]. It was left to his British contemporary James Compton-Burnett, a London based homoeopath, to put homoeopathic *tuberculinum* on the medical map.

In "The New Cure of Consumption by its Own Virus" Compton-Burnett published the results of his five years secret experimentation with his own tubercular preparation between 1895-90[27]. The reason for his secretiveness he confessed in the preface was due to opposition from the allopathic profession regarding the use of live disease materials in therapy. Once Koch had announced his use of a similar product in 1890, however, Burnett felt safe to publish his results. Of fifty- four cases of tuberculosis Burnett claimed to have cured fifty -one of the disease with his own *"bacillinum"*. Burnett prepared *bacillinu*m by triturating a piece of tubercular lung tissue he had obtained from his friend Heath, a bacteriologist[28]. *Bacillinum* was an appropriate name, Burnett claimed, since Heath had also been able to confirm the existence of bacilli within the tissue. It may also have been an attempt to distinguish his preparation from Swan's earlier, and somewhat different, version. In any case, Burnett did not use *bacillinum* alone in his fifty- one cures of consumption, but used the wide range of drugs in use by homoeopaths generally. He did however consider the cure of tuberculosis without *bacillinum* impossible in most cases. In that sense then, *bacillinum* was in homoeopathic terms a "specific" (as a nosode) for tuberculosis- the same drug was used on all patients suffering from the same disease.

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[24] Transactions of the International Hahnemannian Association (1885) p 38

[25] This is still a moot point since the preparation coming from another organism was strictly speaking a modification of the 'pure' disease and hence could be considered 'similimum' rather than 'idem'.

[26] See Winston (1999) p 98.

[27] Burnett (1890)

[28] Burnett names him only as Heath. I have not yet been able to establish his full name or where he worked. See James Compton – Burnett (1890)

The essential differences between Burnett and Koch's tubercular preparations were, as Burnett pointed out, the method of preparation and administration. Whilst Burnett's was made from human tissue; Koch's was artificially cultured. Burnett's *bacillinum* as well as containing the virus was a preparation of the natural disease itself, since it was taken from the human organism in a diseased state. Burnett concluded in 1890 then, that Koch did not discover tuberculin but that, "The artificial hatching [of the bacillus in the incubator] is Koch's discovery, not the remedy itself or its use as a cure for consumption"[29].

Variations also existed in administering the drug. Whilst Koch's preparation was always administered hypodermically, Burnett's could be given either hypodermically or orally. In accordance with the principle of Avogrado's limit (that no original molecules would be left after the 30th centesimal dilution) Burnett never prescribed *bacillinum* below the 30th and often prescribed it in the 100th centesimal dilution when he feared aggravation of the patient's condition[30]. Burnett claimed his clinical experience showed the drug should be administered infrequently and only in the early stages of the disease. By 1900 however, extensive use of *bacillinum* by homoeopaths led the Hahnemannian Advocate to claim *bacillinum* was so powerful that even in the third (degenerative) stage of consumption where there is " [...] breaking down, softening and secondary infection...[Burnett's] *Baccillinum* has saved cases"[31].

Burnett's reservations expressed in 1890 regarding "[...] the palpable dangers of Koch's method.of using tuberculin [...]" proved well founded. The substance proved dangerous in many allopathic hands during the 1890s, with iatrogenic deaths being reported in the literature as late as 1898[32]. Homoeopaths put such failures down to the "reckless" use of material doses given too frequently and in the wrong stage of the disease[33].

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[29] Compton- Burnett (1890) (n xxxi) p vi

[30] Diluting one part drug with 99 parts water/alcohol produced the centesimal homoeopathic scale. When one drop of such a preparation was then diluted further with 99 parts water/alcohol this became the 2C dilution When this process was repeated 30 times this became the 30C.dilution. Repeating this process, 100 times produced the 100 C dilution and so one. The most common dilutions used in the Centesimal scale by homoeopaths (then and now) were/are the 12C, 30C, 200C and 1M (where the dilution was is repeated 1000 times.)

[31] Hahnemannian Advocate (1900) p 728

[32] Journal of Homoeopathics V III (1899-1900) p 86

[33] The Homoeopathician March (1912) pp112-4

By the mid 1890s, however, homoeopaths were using Koch's readily available lymph but in an attenuated form. This released its therapeutic value, they claimed, whilst minimising its side effects. The homoeopath Charles Eaton asked the A.I.H. in 1895 whether it was time the homoeopathic profession shouldn't boldly state "[...] serum therapy [as use of Koch's *tuberculins* had come to be known] is but a clumsy imitation of the irrepressible law, the same dose and the ...potentization of Homoeopathy?"[34]. Similarly, the Advocate of 1897 noted all "[...] Serum Therapy was based on Homoeopathic principles and should be classed as another example of the guiding precept, Similia Similibus Curentur"[35]. Indeed, the Advocate of September 1902 claimed the action of Koch's *tuberculinum* and Burnett's *bacillinum* was practically identical, the one answering to the indications of the other.

Not only did homoeopaths use Koch's *tuberculin* in tuberculosis but also they widened its therapeutic application. In 1896 B Arnulphy from Chicago Illinois put Virchow's post mortem findings on Koch's victims to good use[36]. Arnulphy demonstrated the lesions created by excesses of Koch's lymph corresponded to the catarrhal lesion associated with bronchial pneumonia and hence Koch's *tuberculin* could be used almost as a specific in that disease Arnulphy reported using Koch's *tuberculin* successfully in this way, orally in the 12x potency[37]. Similarly the Advocate of 1902 reported the cure of a 13 year old boy with "[...] tuberculosis of atlas and second and third vertebrae consequent on diphtheria"[38]. The boy could not move his head without the use of both his hands and with great pain. *Tuberculinum* 1M (high dilution) was given and within two days the boy could move his head, after five weeks swelling in the neck was greatly diminished and the boy was active again. Another tubercular patient was cured after three month's treatment with *bacillinum* as was another within one month's treatment. Many successful case studies were reported with Arnulphy noting the use of *tuberculinum* in curing various respiratory diseases such as bronchitis, catarrhal pneumonia, lobular pneumonia, tubercular pleurisy, parenchymatous nephrits and grippe, and even a case of insanity by inducing fever.

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[34] AIH Transactions (1895) p 269.
[35] Hahnemannian Advocate (1897) p 750
[36] Arnulphy thus seems to have meant "specific" here in the "magic bullet" sense. Arnulphy (1896)
[37] Harlan Wells (1912).Also, Allen (1910) pp 569-576
[38] Hahnemannian Advocate September (1902) p 322.

The Allopathic Nihilation of Homoeopathy

By 1912 the homoeopathic and allopathic use of *tuberculin* in tuberculosis had become practically indistinguishable. Allopaths were using it homoeopathically and homoeopaths were in some cases administering it hypodermically and in material doses. One such was the American homoeopath Gardner Sayres, who, after making the upper part of the arm aseptic using soap, water, alcohol and bichloride solution, administered minute but gradually increasing quantities of the virus via injection deeply into the tissues[39]. Sayres began with Mulford's Bullion Filtrate from the tuberculin of Denys known as (B. F). No 1 containing 0.001 milligram (or one cubic millimetre) in 2 minums of *tuberculin* constituted the homoeopathic 7x dilution[40]. With intervals of 3 to 4 days between injections the drug was gradually increased through to B.F. No 5, which contained 2 milligrams of the drug in 2 minums. 20 minums of No 5 constituted the maximum dose of 100 milligrams of *tuberculin* equivalent to the homoeopathic 1x. With higher doses intervals between doses may be 5 to 6 days and would be gauged according to the patients reaction viz." [...] appreciable rise in temperature, headache with malaise, increasing cough or loss of appetite"[41]. Treatment resumed when such reaction subsided with the dose below the one causing such reaction. The above therapeutic course usually took 6 to 10 months to complete. Sayres noted such treatment was used at the Metropolitan Hospital of New York on pulmonary tuberculosis but that such gave equally good results with tubercular adenitis, bone and joint diseases. His clinical observations led him to note four points. First, in cases where the tubercle bacilli persisted in scanty expectoration with some recovery of the patient the treatment should be repeated and was often successfully completed in three months. Secondly, no abscess or infection was noted after the injections. Thirdly, *tuberculin* acted as an expectorant at first. Fourthly, subjective symptoms improved more quickly than physical symptoms.

Corroborating Sayers claims another American homoeopath, Harlan Wells, reported using Koch's *tuberculin* in the 6th decimal potency administering it hypodermically at long

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[39] This was a significant development since traditionally, but not always, the homoeopathic similimum proceeded *up* the centesimal scale, so that less of the material substance would be present and not more. Sayres is doing the opposite here.

[40] 7x was achieved by diluting 1 part drug to 9 parts water/alcohol (1x). After succussion (vigorous shaking) 1/10th of this solution was removed and diluted again with 9 parts water/alcohol, which took the drug to 2x. Repeating this 7 times gave the 7x potency.

[41] Hahnemannian Advocate p 113

intervals. Wells reported many cases where the bacilli disappeared from the sputum, explaining *tuberculin's* modus operandi in terms of stimulating the cells of the body, forming agglutinins, opsonins and other immunizing factors[42]. Likewise, H C Allen (1830-1909) cited Moll of Brixen, who claimed *tuberculin* was a specific for pulmonary tuberculosis as well as bony suppurations, where only high dilutions cured[43]. The Journal of Homoeopathics of 1902 showed that high dilutions were widely used and detailed case studies where CM, 1M, MM, 5M, and 72M (extremely high dilutions) were employed along with lower dilutions such as *silicea* (silica) 30C [44].

By 1910 Allen was able to publish in his "Materia Medica of the Nosodes", an extensive list of tuberculosis virus preparations in use by homoeopaths. As well as Koch's old and new *tuberculin,* Swan's *tuberculinum* and Burnett's *bacillinum* there was the bacillary emulsion used by Halloc, the *filtered tuberculous bouillon* of Denys, the dilute serum of Marmorek, *bovine tuberculin* (from cattle) and *aviare tuberculin* (from birds). The bouillon of Denys appears to have been widely used and was the one Allen himself used with productive results, claiming with the 100th, 200th and 500th centesimal dilutions, "I have in advanced cases most frequently and most easily arrested the progress of the disease: I refer to cavities though not in cases with persistent fever" [45]. Allen stopped short of proclaiming a cure when he said; "Temporary as the ameliorations are, they constitute nevertheless a real progress in tuberculinotherapy"[46].

Showing that reports of the dangers of allopathic *tuberculin* treatment were not the sole preserve of homoeopathic journals (and thereby merely rhetorical), the J.A.M.A. of 1910 related how a German sanatorium had discharged 25 cases of tuberculosis after treatment with *tuberculin* as "practically cured"[47]. Not long after, the same patients attended the sanatorium of a Dr Schroder with severe recurrence of symptoms and acute spread of the tuberculous process. Schroder concluded *tuberculin* had rendered active already existing but occult foci, which in most of these cases proceeded to a fatal termination. Schroder concluded such use of *tuberculin* until the patient was "toxin fast" did not protect against

[42] Harlan Wells (1912).
[43] 60x apparently gave a prompt reaction . Moll cited many favourable cases with the 250th decimal. Allen (1910) p 570-1
[44] Journal of Homoeopathics (1902-3) p 145 by WD Gorton, Austin Texas.
[45] Allen (1910) p 573
[46] Allen (1910) p 574
[47] J.A.M.A. (1910) Vol 54 p 659

tuberculosis but actually favoured it. "The true principle of effectual tuberculin treatment" he concluded "is with the *most minute doses"* (italics added) [48]. He noted the research of Almroth E. Wright (1861-1947), Director of the Institute of Pathology at St Mary's Hospital, London, and others had demonstrated "[...] even *the smallest dose* of a specific vaccine seem to be able to stimulate the production of antibodies" (italics added). Ideal doses were from 0.00005 mg to 5.8/10000mg of *bacillus emulsion* and from 1/1000 to 1-2/100 mg of Perlsucht old tuberculin spaced 10-14 days apart, reducing the dose if a general or local reaction was detected. Schroder claimed "[...] this method of treating tuberculosis with the *most minute doses* of a specific antigen [...]" was a great improvement over the usual methods and "perfectly harmless" (italics added)[49].

Likewise, the allopath R.W. Philip in 1910, Physician to the Royal Infirmary of Edinburgh recommended small doses of *tuberculin* in tuberculosis, stating, "It is best to begin treatment with small dosage [...] By repetition of the same dose so as to exclude the fallacy of a mixed reaction, and by gradual increase, if no effect has been produced, it is commonly easy to determine the *minimal dose* which is *effective"* [50](emphasis original).

How small was small? Philip recommended 0.0001 gramme of Koch's original *tuberculin* as an initial dose, or 1/5000th-1/2000th milligramme of Koch's T.R., or 0.1 cubic centimetre of a 1 in 100,000 solution of Beranecks *tuberculin.* The 1 in 100,000 solution of Beraneck's *tuberculin* corresponded to 10 –5 which approximates to midway between the 2C and 3C of the homoeopathic centesimal scale. Whilst Philip and other allopathic physicians considered the use of Wright's Opsonic Index unnecessary, preferring instead to rely on temperature changes as a guide, Wright's innovation did much to champion the use of small doses in tuberculosis treatment. The index enabled the tracking of the organism's response to *tuberculin* injections so that the dose could be modified accordingly. For homoeopaths this represented a measure of the action of the vital force and served only to validate their practice further[51].

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[48] J.A.M.A. (1910) Vol 54 p 659
[49] J.A.M.A. (1910) Vol 54 p 659.
[50] The Lancet July 2nd (1910) p 21
[51] By use of the patient's serum, washed corpuscles and bacterial emulsion an individual's resistance to a particular infectious disease was able to measured and compared to an average healthy persons resistance- the normal being expressed as 1 and the deviation from the normal being expressed as a fractional ratio of this e.g. .5 Here an individual would possess half the normal number of opsonins .
The index was also useful for treatment. An isopathic preparation was made using the patient's own purulent discharge, growing a culture from this enabling both identification and extraction of the requisite number of

Indeed, the A.I.H. viewed Wright and other allopathic bacteriologists as homoeopaths in disguise .A M Linn of Des Moines, Iowa noted in 1907 Wright's open claim to using 1/2500 of a milligram of tuberculosis bacilli in treatment of the disease, Linn concluding "Evidently he is climbing into the ranks of the high potency men"[52]. Linn was not alone in his sarcasm. H C Leonard Duluth maintained, "Wright should be elected to an honorary membership in every homoeopathic medical society"[53] and Professor Cabot of Harvard astutely noted, "Surely this is a case of 'similia similibus curantur'. The use of bacterial vaccines in infectious diseases recently produced by A E Wright is distinctly homoeopathic"[54]. Wright himself is said to have admitted, "This is pure homoeopathy" and even Von Behring, whilst working on a new tuberculo-therapeutic substance, conceded;

> " [*Tuberculin*'s] therapeutic usefulness must be traced in origin to a principle which cannot be better characterized than by Hahnemann's word 'homoeopathic'. What else causes immunity in sheep vaccinated against anthrax, than the influence previously exerted by the virus, *similar* in character to that of the fatal anthrax virus. And by what technical term could we more appropriately speak of this influence exerted by a *similar* virus than by Hahnemann's word, 'homoeopathy?"[55](italics original).

The homoeopath W. H. Watters of Boston Massachusetts noted how the allopathic recommended first dose of *tuberculin* of 0.000001 of a gram corresponded to the homoeopathic 6x, whilst the less cautious but often more satisfactory doses of 0.0000001 to 0.00000001 of a gram corresponded to the homoeopathic 7x and 8x dilutions respectively

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bacteria depending upon the disease and the patient's immunity level. The preparation was then administered hypodermically.
By the following day the opsonogenic index of the patient would have invariably fallen, denoting the "negative phase" or in homoeopathic language, the "aggravation" of the remedy. This would only be temporary however and would be succeeded by a significant rise –the "positive phase"- over the next seven to ten days. A declining opsonogenic score signalled the administration of another dose until the opsonogenic index reached perhaps double the "normal". By this means a high level of immunity could be sustained and was noted as coincident with a marked improvement in the overall condition of the patient. By means of the opsonic index then the reaction of the vital force to the remedy could be tracked.

[52] AM Linn used 1/2500 of a milligram of tuberculosis bacilli in treatment of the disease.AIH Transactions (1907) pp 312-317 Quotation from p 316.

[53] Linn (1907) (n lv) p 316

[54] Linn (1907) (n lv) p 316

[55] Linn (1907) (n lv) p 317

Not only small, but individualised doses became part of allopathic practice, something homoeopaths had always recommended. The J.A.M.A. of January 22nd 1910 noted "[...] the dosage is at present empirical; each individual case must be an experiment, and the *symptoms* carefully observed after each dose. The clinical oversight is the most satisfactory guide"[56] (italics added).

Also, allopaths came to extend the clinical use of Koch's *tuberculin*. The B.M.J. of December 1900 ran a small piece on the utility of *tuberculin* in diseases other than tuberculosis, just as Arnulphy had suggested with pneumonia four years earlier. Edward Maynard, Assistant Physician to the Sussex County Hospital, presented a case study where the use of Koch's "old *tuberculin*"' cured a woman effectively of lupus[57]. Leaving no homoeopathic stone unturned, allopaths also reported changes in subjective symptoms and personality traits as constituting part of the disease process. Homoeopaths had always alluded to what they referred to as the "mental symptoms" of a patient in disease as being significant, especially in the selection of the curative drug. Similarly, Leibe noticed in 1910 the "psychopathology" of the tuberculous patient. The "tuberculous personality", he claimed, had a "peculiar egotistic, irritable, spoiled child attitude [...] entirely contrary to what the same individuals presented in health"[58].

Whilst I suggest the possibility that homoeopathy paved the way for bacteriology and serum therapy's acceptance, with their concept of minute doses and treating like with like, I argue in the next section that bacteriology provided allopaths with the linguistic means of translating homoeopathic theory into the allopathic universe of meaning. By this means allopaths incorporated homoeopathic theory and extended practice whilst maintaining their medical identity.

[56] J.A.M.A. Jan 22 (1910) p 261
[57] B.M.J. Dec 22nd (1900).
[58] J.A.M.A. (1910) vol 55 p 725

The Management of Nihilation Through a New Language.

From "similia" to "vaccine", from "triturating" to "pulverising"

Koch had initially been reluctant to reveal the content of his new cure for tuberculosis, perhaps for the same reason Burnett delayed publishing and Swan became marginalized. But in time it was admitted by bacteriologists that *tuberculin* represented the toxin of tuberculosis. It was neither a serum nor an anti toxin. In fact it was the diametric opposite of the latter. Edward Baldwin, an allopath, referred to the substance in 1910 as a "[...] vaccine [...] composed of the pulverized insoluble substance of the bacillus itself"[59]. Homoeopaths had referred to the same "pulverising" for over a century referred as "trituration" and as I discussed in chapter three there had been much homoeopathic debate in the last quarter of the 19th century as to its power to dissolve certain substances, especially metals. Now allopaths were using this method, claiming it could in fact prepare an insoluble substance for therapeutic purposes. Allopaths were here using the term "vaccine" in a *post hoc* sense. Only *patients already suffering from the disease* (as established by diagnostic procedures) were given *tuberculin* and only on the condition that the disease was in a "quiescent state". Progressive tuberculosis was always a contra-indication for its use as far as allopaths were concerned. Such treatment, if successful, was prophylactic only in the sense that future episodes of the disease may be diminished, primarily by stimulating "the disease focus to heal or become absorbed"[60]. However, Baldwin admitted that such use did not confer long-term immunity as resistance diminished when treatment was discontinued. Hence, in using the term "vaccine" allopaths were able to describe the action of *tuberculin* as reducing the sensitiveness of the organism to the toxin "i.e. to itself", without invoking the homoeopathic term "similimum"[61].

Renaming the "vital force" and the "minimum dose".

Allopaths referred to them as "minute" and "small doses", homoeopaths, as the "minimum", "dilute" or "infinitesimal dose". Allopaths measured their dilutions in terms of a fraction of a milligram (earlier a "grain") whereas homoeopaths had developed their own decimal and

[59] J.A.M.A. (1910) Vol 54 p 260
[60] J.A.M.A. Jan 22nd (1910) p 261
[61] J.A.M.A. Jan 22nd (1910) p 261

centesimal scales, referring to these as "potencies". The homoeopathic "aggravation" of the administered drug, something homoeopaths had always looked for to assure them the drug was acting, became in allopathic terms, the local or general "reaction", or in Wright's vocabulary "the negative phase". This was followed by improvement or "the positive phase". Stimulating the "vital force" became the practice of "stimulat[ing] the *disease focus* to heal" (italics added)[62]. Allopaths still did refer to the "vital force" or "powers" but this phrase began to be replaced with "immunity levels", "antigens" and "antibodies". Further, vital capacity was claimed to be measurable. Bandelier reported in the J.A.M.A. of 1910 the "vital capacity" of some patients "increased by 290 cc, the excursions by 0.91 cm" whilst others' vital capacity increased by 360 cc and the excursions by 1 cm[63]. Of course, as I have already shown this was not all one- way traffic. The American homoeopath Linn asked colleagues in the light of Wright's hypothesis whether homoeopaths would not be justified in substituting for Hahnemann's concept of "psora" the term "lowered opsonic index"[64]. Some did. Most didn't.

This convergence of practice coupled with a divergence in language between allopaths and homoeopaths is no better demonstrated than in two articles published in 1910 in the Lancet and North American Journal of Homoeopathy (N.A.J.H.) respectively. The content of these two articles illustrate that by 1910 allopaths had absorbed two of the most significant tenets and concepts of homoeopathy, demarcating a boundary between themselves and homoeopaths through the use of a different language to describe the same clinical experience and practice.

Philip noted the new restraint in surgical practice in routinely removing tubercular glands[65]. New research on the pathway of infection explained the lack of success of this practice. A suppurating gland was merely incidental to the general progress of the tubercular disease and its removal altered the prognosis little, if at all. Philip recommended attention should be directed to the process of tubercular infection itself, and he wanted to "[...] press for acceptance the view that the throat- including under the term the nasal, pharyngeal, palatal

[62] J.A.M.A Jan 22 (1910) p 261
[63] Bandelier (1910) pp 916-7
[64] Linn (1907) p 317
[65] The Lancet July 2nd Vol II (1910) pp 19-21

and tonsillar regions-is a vastly more common avenue of general tuberculosis infection than is usually believed"[66] (emphasis added).

Thomas McConkey of San Francisco, California, a homoeopathic general practitioner asked in the same year "How and When is Tuberculosis Contracted"?[67]. McConkey claimed that in tuberculosis inhalation was; "[...] the most important factor in that it is thus that the superficial lymphoid tissue so abundant in the pharynx (tonsils, Luscha's tonsils and numerous scattered lymphoid nodules) are infected. In the same way are the cervical, mediastinal and bronchial groups infected. So the inhalation theory is correct if it is confined to the upper air passages"[68].

In short, though the inhalation theory had come into some disrepute, both physicians argued the theory held good as long as infection *of the lungs* was not explained in this way. Rather, infection of the lungs was secondary. As Philip put it "[...] by primary invasion of the throat and subsequent spread along the lymphatic pathway – invasion of the lungs most commonly occurs". Similarly, McConkey considered "[...] clinically, tuberculosis of the lungs is always the secondary stage". So, both agreed on aetiology, i.e. the inhalation theory, and that the most significant point of entry was the throat.

What about the nature of the disease? The homoeopath McConkey believed "[...] tuberculosis is a disease of childhood in the ordinary meaning of that phrase"[...] the incubation period of the disease having long concealed its true nature since, "The age of greatest morbidity and mortality from pulmonary tuberculosis is that from *the fifteenth* to the fortieth with the maximum about midway between" (italics added). Physicians had long noted early infection, leading some to conclude the disease was inherited. Even after Koch's discovery of the bacillus some, such as Baumgarten, claimed the bacillus itself was inherited. McConkey, rather, suggested tuberculosis was contracted early in life and developed in adulthood. Similarly, the localisation of the initial lesion to the throat for Philip indicated that tuberculosis in the vast majority of cases was a disease of *childhood.* "The earlier the invasion, the more easy and rapid the spread" he noted. For Philip this conclusion linked tuberculosis with other throat diseases of childhood such as diphtheria, measles, scarlet fever,

[66] The Lancet July 2nd Vol II (1910) p 19.
[67] McConkey (1910)
[68] McConkey (1910) p 560.

and rheumatism[69]. In a great proportion of instances Philip suggested, the child is tubercular by the time it is *fifteen* years of age. The inconspicuous nature of many cases of infestation suggested to Philip that as a matter of course the throat of every child should be kept absolutely clean.

Further, Philip acknowledged his favouring a more holistic approach to drug use in tuberculosis rather than a localised one, claiming "My present thesis is that rational *treatment must be directed chiefly to the essential lesion rather than to the incidental occurrence"* (italics original). That is, "We must seek to activate the leucocyte and the bacteriotropic elements of the lymph stream and blood" [70]. The allopathic profession's new found confidence predicated on this linguistic nihilative move enabled Philip to say; "In exhibiting *tuberculin* we make use of an agent *closely related to the infecting organism*, and there is abundant ground for the belief that we thereby reinforce nature's own effort at immunisation"[71](italics added). Strictly speaking of course, this did not constitute immunisation in any long- term sense, but it was a way, again, of describing the process of administering the similimum without recourse to homoeopathic terminology.

Philip also translated the homoeopathic "aggravation" into allopathic terms. In the Organon Hahnemann had stated; "[...] the so- called homoeopathic aggravation, or rather the primary action of the homoeopathic medicine, which appears to increase somewhat the symptoms of the original disease takes place in the first hour or in the first few hours [...]"[72]. Correspondingly, Philip's observation was, "Immediately following the first injection of a suitable dose [of *tuberculin*] the gland may be found slightly enlarged and possibly tender. The gland is congested. In the course of a few days the gland under observation will be found reduced in size". This practice of allopaths and homoeopaths describing the same experiences by means of different vocabulary I have detailed in the table below.

[69] Philip (1910) p 10
[70] Philip (1910) p 20
[71] Philip (1910) p 20
[72] Hahnemann (1810, 1982) (n I) p 129 par 161

ALLOPATHS	HOMOEOPATHS
Natural Protective Mechanism	Vital Force
Immunity	Cure
Vaccine	Similimum
Small/Minimal Dose	Minimum/Infinitesimal Dose
Local/Systemic Disturbance/Reaction	Aggravation
Patient's Aspect	Subjective Symptoms
Solution	Dilution
Dose/Name of Specific Drug	Drug
Pulverised	Triturated

Fig 6 Medical Synonyms in Use by Homoeopaths and Allopaths in their Treatment of Tuberculosis around 1910

Similimum not Idem

By the end of the first decade of the 20th century then, homoeopathic and allopathic treatment of tuberculosis had converged to bear a remarkable similarity, but one difference remained. *Only* homoeopaths *decreased* quantities of drug to *increase* reaction; allopaths never did this. Further, homoeopaths, in general and hospital practice, used a wide range of drugs and not merely *tuberculin* or *bacillinum* in the treatment of tuberculosis. Still, allopathic medicine did not need to become *identical* with homoeopathic practice in order to "colonise" and "nihilate" it- similarity was sufficient. As Coulter has pointed out, in political terms, such similarity made it possible for the A.M.A. in the US, for example, to claim to represent the entire medical profession. This was underscored by the new "tolerance" extended to homoeopaths, represented primarily by the revoking of the consultation clause in 1903, enshrined in allopathic codes of ethics. Whereas homoeopaths had been banished from allopathic medical societies and professional association with them of all kinds, they were now welcomed and consultation with them encouraged, in part to bolster the incomes of rising medical specialists in both groups of physicians [73].

[73] For more on the Code of Ethics and its consultation clause see Kaufman (1971) Chapter IV, p 48 and Coulter (1973) Chapter III p 140

Whilst differences between them continued to be constructed through different medical terminology, both groups of physicians drew on different wider explanations to legitimate their practice. Philip (allopath), and McConkey (homoeopath), had different explanations, for example, regarding the average morbidity and mortality associated with pulmonary tuberculosis. McConkey drew on Koch's germ theory and evolutionary theory, at least in terms of the "survival of the fittest" concept, claiming; "The bacillus reaching the lymph node of a child is content to remain there because it does not wish, so to speak, to reach the lungs yet as it serves its species best by providing for the infection of the next generation of the host"[74]. On the other hand, Philip concentrated on events associated with local time, discussing the physiological processes involved in the disease in terms of weeks and months. Not that homoeopaths in general, or McConkey in particular, were averse to describing physiological processes as has already been demonstrated. Rather, Philip *limited* his explanation to these processes, whereas McConkey *extended* his to broader "scientific" issues. In this respect then it could be argued the homoeopath was more scientific in his discourse than the allopath.

The contrast between the two authors regarding their "scientificity" as defined here in terms of an experimental evidence base, can be seen also in the appeal to *clinical experience* by the allopath whilst the homoeopath used *experimental evidence* to support his case. McConkey, in relating the secondary nature of lung affectation noted the experiments of Baumgarten, Harbitz, Theobold Smith and others, claimed such showed "[...] that localization of the lungs occurs independent of both inhalation and ingestion" [75]. Philip on the other hand alluded only to his clinical experience when he stated "If you will follow the developing process from week to week and month to month, you will find the cause of this progressive variation in size to be the gradual extension of the process over successive glandular areas"[76].

Indeed, it was easier for the homoeopath to appeal to scientific theories of this kind since the "law like" claims of evolutionary and other theories resonated with homoeopathy's therapeutic Law of Similia. McConkey revealed this pre-occupation with "law" when he described the "beautiful [...] workings of the laws of heredity and adaptation [...]"[77]. Further, he referred to "known physical laws" dictating that matter suspended in the air

[74]McConkey (1910) p 562
[75] The Lancet July 2nd Vol II (1910) p 20
[76] The Lancet July 2nd Vol II (1910) p 20
[77] The Lancet July 2nd Vol II (1910) p 562

currents of necessity strike the walls or sides of the nose, throat, pharynx etc in contagion. But more is going on here than one physician appealing to science and the other not. An interesting manoeuvre here is the homoeopath situating his discourse, by appeal to evolutionary theory, within a universal and naturalised time frame and the allopath, by appeal to recent clinical experience, situating his in a local one. In fact McConkey was quite explicit about his affinity to a naturalised view of time when he claimed "[...] to properly comprehend the nature of tuberculosis we must seek to get the point of view of the naturalist rather than that of the doctor called to treat the patient"[78].

These appeals to different time frames performed important functions for both homoeopaths and allopaths. As Johannes Fabian has pointed out, the two key features of universal time are its totality (applies to the whole world at all times) and its generality (applies in a large number of instances)[79]. Certainly homoeopaths had long argued for the universality and generality of the homoeopathic law and for decades this had been the cornerstone of their scientific platform. But the most interesting factor is the localised time usage of the allopath. What significance can be drawn from this? I think this can be seen as a rhetorical move denoting the marked contrast allopathic medicine was experiencing with both its own therapeutic past and its contemporary therapeutic competitor. From heroic doses to expectant therapy to dilute remedies, allopathic medicine had to find a way of negotiating its absorption of similia without losing its identity to homoeopathy. The localising of the allopathic time frame can be seen as a means of enabling allopaths to perform a therapeutic u- turn and managing a rupture with its own past, drawing no longer on the authority of tradition but upon the newness of the present, the localised setting of the here and now. At the same time this constituted a denial of any homoeopathic lineage. Indeed in discussing therapeutics Philip, the allopath, made a particularly shrewd linguistic manoeuvre when he described "vaccine therapy" as "Rationalist" since it " afforded opposition" to the spreading infection even though "[...] our purpose must be the production of immunity by stimulation of the natural protective mechanism"[80]. Rationalist identity was thus maintained by operating a kind of conceptual and linguistic syncretism. By emphasising disease causation *and* treatment

[78] The Lancet July 2nd Vol II (1910) p 559
[79] J Fabian (2002) p 3
[80] The Lancet July 2nd Vol II (1910) p 20.

outcome, whilst simultaneously collapsing the significance of intervening therapy, Philip was able to maintain the illusion of contraries or opposition[81].

Conclusion

This chapter has attempted to redress some of the historiographical imbalance in the history of homoeopathic medicine highlighted in the introduction by analysing tuberculosis from both allopathic and homoeopathic clinical sources. This has meant giving voice to homoeopathic clinical sources such as medical journals, papers presented at society meetings and patient records rather than analysing what homoeopaths were doing in the context, or through the eyes of, allopathic practice as if the latter were some kind of normative standard.

I have argued that during the 1870s homoeopaths and allopaths approached the treatment of tuberculosis differently. For allopaths the emphasis was upon nutritional and meteorological support of the constitution, whilst drugs could relieve unpleasant symptoms. For homoeopaths only drugs could offset the scrofulous constitution, with nutrition and climate playing a secondary, supportive role to the similimum. Allopaths remained Rationalistic in emphasising the importance of discovering and consequently removing the cause of tuberculosis. Homoeopaths, whilst not uninterested in aetiology, remained strongly empiricist in their testing of new drugs to treat the disease. Further, the 1870s and 1880s saw American *homoeopaths* with the most concrete scientific identity of the four groups of physicians considered in this thesis, as measured by their self- confident response to Koch's announcement of his discovery of the tubercle bacillus in 1882. Not only did American homoeopaths criticise the therapeutic implications of Koch's findings, as both American and British allopaths did, but also, significantly Koch's, science [82].

I have shown that homoeopaths pioneered the use of live tubercle bacillus in treating tuberculosis fifteen years before Koch produced *tuberculin*. Homoeopaths prepared both *tuberculinum* and *bacillinum* for clinical use based upon homoeopathic principles before the tubercle bacillus was even discovered. My demonstration of historic priority for

[81] Historians make this linguistic move by collapsing the significant time and space between events in order to imply causality and continuity, thereby heightening the collective momentousness of those events. See Fuller (1997) p 51.

[82] That Koch's bacteriology became accepted does not make American homoeopath's critique of it any less significant, since it was by no means clear at this time that Koch would win over the scientific community.

homoeopathy strengthens the case for nihilation over simple convergence. Homoeopathy from the outset had argued for the operation of the vital force and the use of small doses in curing disease. Significant numbers of allopaths had adopted both these practices by the 1850s and mid 1870s respectively. By the 1890s allopaths adopted similia and the minute dose on the back of homoeopathic publication of their results with the bacilli permitted by Koch's 1890 announcement. At first unsuccessful in treatment, Koch's *tuberculin* was used by homoeopaths first in safe, small doses. In turn, homoeopaths adopted Wright's Opsonic Index in the first decade of the 20th century to legitimate what they had been doing for thirty years.

Using tuberculosis as a case study I have argued that allopaths used the language of bacteriology to cognitively nihilate homoeopathy and to maintain their symbolic universe in the face of medical rivalry. I suggest that bacteriology enabled allopaths to adopt homoeopathic concepts and practices into their knowledge base and claim them as their own without losing their medical identity or legitimacy. By the beginning of the 20th century allopaths had translated not only the *vis medicatrix naturae* into their world of meaning, but also the principle of similia and the minimum dose. In this process homoeopathy lost cognitive authority, as evidenced by the relativising of homoeopathy with allopathy, antipathy and contraria by homoeopaths themselves (shown in chapter four), increased homoeopathic membership of the A.M.A. after 1903 (noted in chapter one) and a sharp reduction in the number of homoeopathic medical graduates in the early 20th century (covered in the next chapter).

Whether allopaths adopted this strategy in the context of other diseases and treatments remains to be researched. What can be said, however, is that as the colonised and not the colonisers, homoeopaths lost the historical credit for pioneering tuberculo-therapeutics. That homoeopaths were innovators in this area was acknowledged at the time by significant non-homoeopathic sources (though allopathic physicians never acknowledged this). In May 1907 the Association for the Study and Prevention of Tuberculosis openly crediting the homoeopath Burnett with the early use of *tuberculin.*

Whilst the allopathic use of homoeopathic material (and vice versa) is traceable and was sometimes openly acknowledged, it's possible that the linguistic and conceptual operations necessary to nihilate homoeopathy occurred at the level of the collective unconscious. That

is, allopaths really did see bacteriology as something new and not a disguised version of homoeopathy. It may well be that most, if not all, nihilative strategies between rival groups occur at this subconscious level, which of course makes them difficult for actors to resist and historians to trace. What is clear is that by the end of the 19th century allopaths rarely engaged in the debates over medical theory and practice that had characterised homoeopathy's early years. They ignored rather than ridiculed similia. They resisted spurious analogies to the minimum dose. It's possible that with the exclusion of homoeopaths from allopathic medical societies, the rejection of homoeopathic submissions to allopathic journals and the consultation ban, anxiety over the homoeopathic challenge was repressed in the allopathic collective consciousness. With no outlet for expression or resolution it is possible to see repressed allopathic fears that homoeopaths had something medically valuable re-emerge into allopathic consciousness with the acceptance of bacteriology and its attendant modifications of similia and the minimum dose. It was the incorporation of their medical demon, the retrieval of a discarded self [83]. Perhaps it is because homoeopaths performed no such exclusion and repression, and did not generally view allopathy as a threat, that they lacked a similar nihilative impetus[84].

In any case, the implications of these developments should not be underestimated. Vaccine therapy did not occur in some backwater in medicine, but rather, as Michael Worboys has pointed out constituted, especially in relation to tuberculosis, "[...] a radical new model for medicine, which promised a reordering of practices and structures [...]"[85]. However, vaccine therapy and the use of tuberculin in tuberculosis was not, as Worboys argues, merely attractive to the medical fringe. Rather, the *concept* and *practice originated with them, as was acknowledged at the time.* It is only with the subsequent re-writing (by the winners) of history that scholars like Worboys can make such claims. Wright did not make a significant *theoretical* contribution to science but a *practical, technical,* albeit significant, innovation

[83] In this I see a fusion of the works of Hegel and Jung which I will develop in the conclusion. Hegel advocated micro-macro explanations and Jung concerned himself with the process of individuation. I see both occurring here: allopathy developing into a new self as a result of (partially) retrieved repressions and this individual psychological process operating at the social structural level.

[84] This point is suggestive rather than definitive. It is unclear to me whether social groups and institutions operate nihilation at the conscious or subconscious level. That is their incorporation, defining and negative legitimations are conscious to be sure, but whether they are aware of an objective of nihilation is another question entirely. It's difficult to see how a group may operate like this self- consciously, whereas individuals often do. T.Roosevelt, for example, openly embraced aspects of American Progressivism in the early 1900s in order to dis-empower W J Bryan. See Hofstadter (1962) pp 132-33.

[85] Worboys (1992).

based upon homoeopathic principles. Wright *can* be credited, however, with legitimating the practice and giving it a new name.

Homoeopathy and allopathy were not, then, incommensurable at the turn of the 20th century. The differences between them, I suggest, were constructed through language. Especially from 1903 onwards with the renouncing of the consultation clause neither group membership or medical practice underwrote allopathic and homoeopathic identity. The new allopathic linguistic strategy helped to maintain their separateness. I have shown that certain allopathic and homoeopathic medical concepts, especially in their treatment of tuberculosis, were interchangeable. Thus, incommensurability says more about group membership and competition than it does about ideas. Medical identity rests not on practice but on language, particularly medical theory. It is thus even more essential for historians and sociologists to look more closely, not simply at what is said by social actors, but at what is done. Otherwise language becomes rhetoric and historians and sociologists alike will continue to miss the real similarities, differences and processes in history they are obliged to reveal.

In the next, concluding, chapter I will show how these nihilative strategies of allopaths occurred against a back- drop of profound socio-economic change in American society during the Progressive Era[86]. I will argue that the allopathic project of nihilation came to fruition at the same time that the conflict between America's new corporate class and the Federal State reached its climax[87]. I will suggest that homoeopathy and allopathy possessed divergent ideological affinities and that the outcome of their medical rivalry was in large part determined by the resolution of this wider battle[88].

[86] Coulter (1973) Chapter seven and Brown (1979)

[87] Following the example of others, notably Brown (1979) p 9, the capitalised "State" in this thesis refers to the political institutions and agencies of federal government, which embody society's political authority. Uncapitalised "states" refers to individual states in America.

[88] Berger and Luckmann (1964) p 138 " Different social groups will have different affinities with the competing theories and will subsequently be "carriers" of the latter."

Chapter Six

The End of Medical Progress: The Battle Between American Corporations and the State and the Decline of Homoeopathy During the Progressive Era.

American historians describe the decades from 1870 to 1920 as the "Progressive Era", a period of economic upheaval, radical politics and social reform[1]. This final chapter will show that whilst not precisely co-terminus with the decline of Progressivism, homoeopathy's demise was inextricably linked to it. I will draw on the concept of "ideological resonance" to explain this historical phenomenon. Homoeopathy's fairly rapid decline in the US in turn had an impact on homoeopathy in other western nations[2]. Whilst this point has not been altogether lost on historians, especially on the Marxist historian Richard E. Brown and the homoeopathic historian Harris Coulter, this chapter will explain the association between homoeopathy and Progressivism differently[3]. Brown and Coulter emphasise the correspondence between Gates and Rockefeller's self-conscious vision of scientific medicine and allopathic clinical medicine in the early decades of the 20th century. Along with other historians they agree that, in his philanthropy in general, and his medical science programme in particular, Rockefeller was simultaneously rescuing a tarnished personal image and a threatened corporate community[4]. Whilst Carnegie distributed his wealth out of religious conviction, both he and Rockefeller agreed on the futility and corruptibility

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[1] Dating of the Progressive Era varies. Michael McGerr (2003), Brett Flehinger (2003) and Richard Hofstadter (1962) all view the Progressive Era as arising out of the Populist Movement that proceeded it but there are differences in the dating of the Populist Movement. Whilst McGerr dates Populism as running from 1865 to 1890, Hofstadter sees it as beginning in 1880 and ending in 1900. Similarly, for McGerr the Progressive Movement proper began in 1890 and ended in 1920 whilst for Hofstadter it spanned the fewer years between 1900 and 1914. Flehinger begins his account of the Progressive Movement around 1900 also primarily because his emphasis is upon its political expression through the American Presidential election campaign of 1912.
However, like all historical eras the distinction between the Populist and Progressive Eras conceal important similarities. The anti-monopoly impetus, central to the Progressive Era, had its roots in the Populist sensibilities of farmers and 'small' businessmen. Such sentiments expanded during the Progressive Era and were championed by the urban middle classes, who redirected and augmented populist calls for the outlawing of monopolies into a concerted call for economic restraint and moral virtue. At risk of doing violence to such nuanced readings of history, and because of the close relationship between Populism and Progressivism as well as homoeopathy's transformation from a populist movement earlier in the 19th century to a competing profession associated with the scientific reform of medicine at the end of the 19th century, (Kirschmann 2004 p 19) I will refer to the entire period of 1870-1920 as 'The Progressive Era.'

[2] In the late 19th and early 20th centuries homoeopaths in America corresponded with many European nations, especially Britain and Germany, regarding homoeopathic research.

[3] Brown (1979) Coulter (1973)

[4] Brown (1979) Coulter (1973) McGerr (2003)

of wealth. Philanthropy, Rockefeller believed, rescued a second generation from vice whilst denying the State its due of inheritance tax.

This final chapter will argue that allopathic medicine had an ideological resonance with corporatism, whilst homoeopathy's ideological position corresponded more closely with the Progressive Movement. I will suggest that this was particularly the case with regard to the moral issues embedded within the Progressive reform agenda. Moreover, allopathic medical schools were concentrated in the private sector which facilitated philanthropic control, whilst homoeopathic schools were mainly reliant on public funding. Thus, homoeopathy and allopathy came to be affiliated with wider social and cultural forces, their ultimate fate being tied up with the resolution of the conflict between these forces.

The period 1900 to 1920 I consider to be the Progressive Era proper, since the Progressive Movement was at its most influential. By this time a range of legislative moves designed to curb the excessive profits of the still new corporations had metamorphosed into a range of political agenda. "Progressivism" became a cultural buzzword and just about everyone pedalled their ideology under its banner, the corporations included. The Foundations, the charitable arm of the corporations, envisioned their rationalisation of social institutions, such as medical education, as a natural corollary to their successful rationalisation of the economic sector, and as such considered it a Progressive ideal[5]. But this should not detract from the fact, during the Progressive Era, the Progressive Movement still existed as a political voice of the middle classes, and as such, maintained a problematic stance toward the corporations. Furthermore, not all who claimed to be Progressive truly subscribed to its values.

The 1912 American Presidential election campaigns represented the climax of the Progressive Movement's call to arms, centring round social conciliation and corporate wealth though it became clear to most social commentators that this was really a battle for the control of America. Put simply, the Progressive Movement called upon the only institution capable of mounting a defence against threatening corporate hegemony: the State. This chapter will suggest that in its ideological resonance with

[5] Wheatley (1988)

Progressivism, and by extension the State, rather than corporatism, homoeopathy lost out.

Defining the Federal State and Capturing an Emerging American Phenomenon.

The activities of the American federal State in the early decades of the 20th century are central to this chapter, and ultimately to the argument of this thesis and as such, clarification of what actually constitutes the "State" is necessary. I take the view, based upon the historical research carried out for this chapter, that the State is not a single entity. It can act in different ways, and even have different components, at different times. That is to say it does not represent a single set of people, groups or interests. The fact that it has multiple components does not mean that it cannot take (or appear to take) a unified stance at critical historical moments, war being the obvious example, whilst at times of equilibrium the State can permit internal dissent and the risk of relative fracture. It all depends where the State finds itself juxtapositioned in the political field. For this reason also the State an arena where multiple interests merge, come into conflict, or produce coalitions so that the State's resources can be mobilised by various social groups. At its core however, exist the offices of legislative and executive power, the institutions of government but these offices always remain independent of the individuals that comprise them at any one time[6].

Throughout the 20th century, the State has been a contested concept. According to the political scientist Timothy Mitchell, two responses have dominated post war thinking on the subject[7]. The first suggests dispensing with the concept of the State altogether replacing it with analysis of the "political system", but establishing where the political system ends and civil society begins is more elusive than defining the boundaries of the State. The second response to the problem, especially since the late 1970s, has been to bring the concept of the State back, but to define it much more narrowly. This reincarnation conceives of the State as a subjective system of decision- making, an idealist rather than a materialist notion. Focusing on the elusiveness of the State/society boundary, which has dogged the above approaches, Mitchell suggests

[6] See Skinner (1989) for a history of the development of the modern conception of the State.
[7] Quoted in Mitchell (1991) p 77.

this very elusiveness is a clue to the nature of the phenomenon in question. In essence the State *is* boundary work. Yet it is a boundary work that does not mark a real exterior. Rather, "[It] is a line drawn internally, *within* the network of institutional mechanism through which a certain social and political order is maintained " (italics original)[8]. It is not an autonomous object or actor. Neither is the "line" drawn an illusory one. Rather, drawing on the work of Michel Foucault, Mitchell argues that producing and maintaining the distinction between State and society is itself a mechanism, or a discipline, that generates resources of power so that, "[T]he apparent boundary of the state does not mark the limit of the process of regulation. It is itself a product of those processes"[9]. Thus, "statist" approaches to political analysis have actually got it the wrong way around. It is not that the State is the starting point of these regulatory or disciplinary processes, neither Skocpol's "independent cause" or Nordlinger's "public officials writ large", but it is the product of disciplinary practices that magnify differences, which create the state /society distinction and attribute the former, mistakenly, with material reality[10].

Furthermore, and important for the argument of this chapter that the federal State in the U.S. came into being in a new way in response to corporate hegemony and Progressive activism in the early 20th century, Mitchell argues the modern State was brought into being *through* new techniques of organisation and articulation. The State didn't *mobilise* these techniques to defend itself, or represent its own or other key interests, it was *created* as separate from civil society at the moment of their deployment. Foucault, of course applies this notion of a "technology of power" society wide to schools, hospitals, prisons and mental institutions as well as government offices, claiming this modern process began in the 18th and 19th centuries. For Foucault, these methods of enclosing and partitioning space, systematising surveillance and inspection, reducing complex tasks to multiple simpler ones actions, define the modern era. Mitchell sees these processes as producing a State which has a structural effect, an effect produced out of a binary order of individual versus apparatus, practice versus institution, or society versus the State, itself an outcome of these precise specifications of space and function

[8] Mitchell (1991) p 90.
[9] Mitchell (1991) p 90.
[10] Mitchell (1991) pp 91 and 83 respectively.

Foucault suggests disciplinary power produces a new kind of person, the "[...] modern individual, constructed as an isolated, disciplined, receptive and industrious political subject" so that "[...] individuality is the product of [power] relations"[11]. Though more deterministic, there appears to be similarity between Foucault's "modern individual" and Pierre Bourdieu's "minds of state". Bourdieu claims;

"The construction of the State is accompanied by the construction of a sort of common historical transcendental, immanent to all its 'subjects'. Through the framing it imposes upon practices, the state establishes and inculcates common forms and categories of perception and appreciation, social frameworks of perceptions, of understanding, or of memory, in short state forms of classification. It thereby creates the conditions for a kind of immediate orchestration of habituses which is itself the foundation of a consensus over this set of shared evidences constitutive of (national) common sense"[12].

Citing Thomas Bernhard who claimed school "[...] turned me into a state person, regulated and registered and trained and finished and perverted and dejected [...]"[13] Bourdieu defines the State as " [...] the culmination of a process of concentration of different species of capital"[14]. The various species of capital, physical (army, police), economic (especially taxation), informational (or cultural), symbolic (legitimation) whilst interdependent struggle within the field of power, or space of play, for power over the State, or for political capital we may say, as a kind of "metacapital". That is, the players struggle over the statist capital granting power over the various species of capital and their reproduction, particularly through the education system. In short, each species of capital vies with the other for control over the power granting function of the State.

Whilst not obviously complementary both Bourdieu and Foucault are post-structuralists and both are concerned with practices. Bourdieu found the opposition of objectivism and subjectivism "absurd" and instead conceived of a dialectical

[11] Mitchell (1991) p 93.
[12] Bourdieu (1994) p 13.
[13] Bernhard clearly didn't like school. Bourdieu (1994) p 4
[14] Bourdieu (1994) p 4.

relationship between actor and structure, between individual and society. In a similar (but not identical) fashion Foucault in his later work came to focus upon the microphysics of power, rather than structural constraints that may exist at the level of society. Whilst for Foucault also these social structures definitely exist, so always does resistance to them, resistance based upon the agency of individuals. For Foucault, knowledge is power (or particular kinds of knowledge) so that power is both contested and diffused throughout the social structure. Through the concept of the "genealogy of power" Foucault concerns himself with how people govern both themselves (discipline) and others through the production of knowledge, particularly knowledge *practices*. Thus Foucault concerns himself with the practicalities and rationalities that make up the means of rule and government, at the level of both self and society. Part of this concern led to his interest in the operations of the State.

Thus rather than defining the State in a somewhat static way Bourdieu and Foucault are useful in my view as they conceptualise the State in more open, processual, non material and non institutionally bound terms. For them the State is inter-relational, socially constructed through interaction and to some extent an ongoing power struggle. To talk of it as a "thing" is to reify it. For Bourdieu the State is a "field of play", for Foucault it is the "outcome of a set of disciplinary practices[15]". To be sure they are both statists in so far as they see the State as being real in its effects.

Synthesising Bourdieu and Foucault's theoretical frameworks in the following analysis it is possible to see that at the turn of the 20th century the redistribution of legitimation (symbolic capital) from many local fields to one national field contributed to the emergence of a national, federal State in America. It was not simply that the State was called upon by Progressives to restrict the power of the new corporations, it was that in doing so, in operating within the field of power to curb corporate excesses, the Federal State *came into being in a new way in America.* It became empowered and defined by the conflict in which it became embroiled. Or in more Foucauldian terms, the State became redefined according to the new disciplinary and regulatory practices it was both deploying and subjected to. The concentration of economic capital on a national level redefined and repositioned the State in so far as it

[15] Bourdieu (1994) p 5. Mitchell (1991) p 93 and Foucault (1977).

produced a serious (perhaps the first) national problem. I argue that during this period Bourdieu's signs of State emergence occurred.

Importantly, the establishment of an effective national fiscal system occurred at this time. Whilst this is usually linked to the support of armed forces (physical capital), in the U.S. national taxation on income was part of the political representative's arsenal in the war against the corporations (and only later against Germany). Bourdieu notes that there is agreement among scholars that recognising the legitimacy of taxation (symbolic capital) is bound to the rise of a form of nationalism since the broad based collection of taxes contributes to territory unification, or "of the state as a unitary territory"[16].

Coupled with the concentration of economic capital comes a concentration of informational capital (of which cultural capital is a part) correlated to the unification of the cultural market, whereby all codes, especially linguistic and juridical, become unified and communication (such as terminology) becomes homogenised. By this means a national self -image is born, one inculcated and reproduced through social agencies, primarily the school system. The age of national education, increasingly centralised social welfare and the continual statistical profiling of the population (including medicine), this was the age of the "Man of Goodwill" in America for whose benefit the Progressive defence of the democratic system against the corporate giants was mounted[17]. Direct, popular democracy required new governmental machinery, such as the direct primary, whereby the average man could act according to his higher principles rather than simply personal or group interest and represented a realisation of Yankee-Protestant ideals of personal responsibility. Much of the anti trust rhetoric of this time, and there was ultimately more rhetoric than result, reinforced a public national image of democracy, individualism, freedom and equal competition for the little guy.

This time period is also littered with symbolic capital victories for the newly positioned national State. The capital, as Bourdieu notes, lies in the recognition by social agents endowed with the categories of perception to know it, recognising and

[16] Bourdieu (1994) p 7.
[17] Flehinger (2003) Chapter VI

valuing it. Various legislative moves, such as the Sherman Anti Trust Act of 1890 and centralised taxation, became hallmarks of the period but had little material effect on most of America's wealthy. Nevertheless, when Theodore Roosevelt brought the great anthracite strike to arbitration and successfully prosecuted the Northern Securities company in 1902, the public were reassured that the federal State was both independent and strong and "[...] were symbolic acts of the highest importance"[18]. Thus, the State, in this context, the office of the Presidency, Congress and the legislature were able to create a mind of State which suggested the State was neutral and strong and able to counter corporate power. Thus the, up until now, rather diffuse symbolic capital wielded by the middle classes, the Progressives and the major political parties regarding the nobility of democracy and individual freedom, became bureaucratised and hierarchical (in Foucault's terms, "regulated" and "disciplined") in the new legal armamentarium at their disposal. Bureaucratised and regulated through law, hierarchical in that some trusts and combinations were seen as better (less monopolistic) than others, and objectified though the political platform given these ideals. The Progressive Movement spawned the Progressive *Era.*

At the same time the corporations, by virtue of their very size, demanded a new form of management, one centred around the bureaucratisation of business activity, new accounting and governance procedures centred around the board of directors rather than the, by now virtually extinct, owner/manager. These news ways of partitioning time, space, power, money and people came to be mirrored in State and government practices, a process that reached its climax during the years of America's involvement in World War I and the mobilisation and coordination of resources that the war required. Disciplinary power enabled bureaucracy to develop, and with it new states of mind and being. At the same time demands for restraint coupled with greater accountability were placed upon both corporate and government machinery. Corporations were answerable to the legislature and the Government was accountable to the people, introduction of the direct primary enabling that process[19]. Indeed, during the First World War and in Bourdieu's terms, I would argue that the corporations came to constitute part of the field of play of the State, they came to be

[18] Flehinger (2003) p 233.
[19] Bourdieu isn't explicit in this paper about who benefits from the wielding of such state power. No doubt he envisages variable incarnations of ruling elites as benefactors.

part of what the State constituted, cooperating with government and legislative agencies in the war effort and at the same time proving themselves indispensable to governing agencies and society generally.

Thus, in what follows, I will attempt to illustrate the changes in medicine within the context of the operations of the State as a field of power and a set of disciplinary and regulatory practices, and a range of agents being more or less prominent in the field. It needs to be borne in mind however, that the two theorists used here are French and their work has to be seen in the context of their own national history. i.e. the French Republic. Thus, hegemonic and deterministic overtones apparent in the work of both theorists at times needs to be tempered in accordance with the more open American political system. Thus I want to emphasise those aspects of their work that suggests the State is a space of flux, where arguably no particular interest is consistently represented (apart from that of the bureaucrat perhaps) but where competing agencies can mobilise the various species of capital which constitute the State with greater or lesser degrees of success at different times to act in their own interests. This will always only be inevitably temporary. The Progressive Era, I argue, was a time when the corporations were struggling for the conference of informational (especially cultural) capital upon themselves. For the corporate philanthropies "science" became their most viable currency. Whilst at the boundaries of the field of play, portrayed as they were as the national enemy by the Progressives, the corporations in their struggle helped to define both what the State in America was to become, and what medical science was to be. But before I go on to analyse the conflict within medicine at the turn of the 20th century, I need to explain more fully the origins and nature of the Progressive Movement itself.

What was Progressivism? The First Phase: 1870-1897

Progressivism was, as Hofstadter, Flehinger, and McGerr point out a sustained, multi-layered social and political movement rising out of Populists call for agrarian reform[20]. Being urban rather than rural, and seeking reform through the legislative and political process rather than strikes and marches, Progressivism was the child of the

[20] Hofstadter (1962) Flehinger (2003) and McGerr (2003)

American middle classes. Not that they were at liberty to disown their humble progenitors. As Hofstadter notes, the intimate link between the two movements manifested itself in the fact that all the major achievements of the age (and Hofstadter credits Progressives with more than most historians), such as tariff, railroad and trust regulation, were subject to Congressional action, and thus were dependent upon Senators votes from the agrarian regions and consequently were moulded by their demands. Nevertheless, the advent of Progressivism was signalled by the urban middle classes sequestering the Populist leadership and expanding their agenda to embrace national concerns.

Progressives were concerned with the growing economic and political unrest characteristic of the last decade of the 20th century. Such unrest served to threaten the utopian America the middle classes had worked hard to construct. Anxious to build on their economic successes and to see their children and grandchildren benefit from their labours, middle class Americans sought to mediate increasing class conflict. Economically this amounted to bringing some of the benefits of America's wealth to the poor and to remind the rich of their responsibilities to their less favoured compatriots. Culturally, it was in many ways an attempt to make all America middle class[21].

Politically, it made Progressives anti-monopoly and pro competition. This made them both anti-corporation and anti- union. Class identity produced as much conflict as corporate greed in their view and they favoured association over collectivism. For Progressives the best ground was the middle ground, where their feet were firmly planted. Many had witnessed the hostile aggression meted out against immigrant Chinese workers by those affiliated to white labour working unions. The worst culprits were the craft unions who attempted to restrict the supply of skilled workmen through rigorous apprenticeship and hiring[22]. 1870 saw the Californian Workingman's Party actively support the popular but violent "anti coolie" programme, responsible for consumer boycotts of Chinese goods and services[23]. Indeed, delegates of the Workingman's Party enabled the passing of extreme anti - Chinese legislation at the

[21] McGerr (2003)
[22] Kwong and Miscevic (2005) particularly chapter five.
[23] Praetzellis (2004)

California State Convention of 1878, with a modification of the State constitution declaring the provision of direct or indirect employment of any Chinese to be illegal, except as a punishment for a crime. Gradually, Chinese workingmen generally lost the right to work in most industries becoming concentrated in the dangerous explosives and laundry industries, and they lost the right to vote. This prejudice reached the federal level culminating in President Arthur's signing of the 1882 Chinese Exclusion Act. The Act suspended the immigration of the Chinese to the United States and denied those already there the option of naturalisation. Whilst the problems of immigration, unemployment, low wages and public health (which perhaps applied to their occupational concentration in laundries) were real enough, these political problems metapmorphosed in a mob rule mentality to the outright persecution of Chinatown, Chinese immigrants suffering bullying, arson attacks, street threats and violence.

The call for economic redistribution was also predicated on the Progressive belief that social behaviour was economically underpinned: in short, that poverty and economic constraint led to vice. Progressive reformers, such as Jane Addams, instituted settlement houses such as Hull House in 1889 based upon the principle of association to lift the poor, particularly women and their children, from poverty[24]. The aim of Progressives was to end class identity and conflict, not to reinforce it. Still, like many of her Progressive colleagues, Addams viewed the fate of the poor as the foundation of social stability.

Progressives considered the federal government's role to be crucial in such conciliation, especially in eliminating what were considered the vices of the era. In particular Progressives sought government regulation of sexuality. Prostitution was considered particularly socially damaging and a direct result of poverty. Divorce was considered too easy with America in the last decades of the 19th century enjoying the highest dissolution of marriages in the world, the rate rising from three divorces per

[24] America's wealthiest upper ten per cent. This is a phrase used particularly by Michael McGerr (2003) but not by other authors. It was a phrase used by the Episcopalian Rector Dr William Rainsford of St. George's Church, New York, indicating his condemnation of the Bradley-Martins impending luxurious ball to be held at the Waldorf Hotel. I have not been able to determine whether McGerr is recovering a widely used 19th century term or whether it is a term he particularly likes. At any rate, as he himself points out, by the turn of the 20th century the upper ten were more an upper 1 or 2 (per cent). I have found it useful to use the term myself as a change from 'elite', 'corporate class', 'capitalists' etc.

thousand in 1890 to four per thousand in 1900. Progressives also advocated temperance, linking abuses of alcohol to poverty. Progressives enacted legislative moves after 1910 dealing with worker compensation, the labour of women and children including the minimum wage for women, hours of work and old age pensions. At this time between 16,000 and 17,000 trainmen were the victims of industrial accidents every year, about one in ten or twelve of workers so classified. As Hofstadter says, "The insistence that the power of law be brought to bear against such suffering is among [America's] finest inheritances from the Progressive movement"[25].

Thus, Progressives reacted against the leisure seeking ethos competitive capitalism had created, particularly the flagrant and in their view, irresponsible, parading of luxurious pleasures by the upper ten. They believed individuals could and should be changed through federal and state government intervention, since their environmentalist philosophy taught that changes in the environment produced changes in the individual - heredity's power was not absolute.

A particularly significant feature of Progressivism was the rise of the Women's movement. This movement called for the reworking of domesticity and it is here that one of the fundamental contradictions within Progressivism became exposed. Whilst the woman tending to hearth and home remained the middle class Progressive ideal, the core capitalist regard for individualism led the rebellion against domesticity. Extreme individualism led to the decadent family life styles of the upper ten, Progressives believed, where family members never ate a meal together and each did their own thing. Where family life was reduced to simply sharing a roof rather than intimate relationships, no social utopia was possible. Whilst promoting family values, Progressives, such as Elizabeth Cady Stanton spoke of the female "[...] birthright to self-sovereignty"[26]. Recognising their obvious inconsistency, women Progressives began to de-emphasise individualist rhetoric and spoke instead of the modern woman's mission to make "the whole world Homelike." Progressives amplified the call, already sounded, for middle class women to have a role outside of the home, demanding access to the workplace and the right to vote, irrespective of their marital status.

[25] Hofstadter (1962) p 240.
[26] McGerr (2003) p 71

Homoeopathy and Progressive Ideals: The Ideological Differences Between Allopathic and Homoeopathic Medicine 1870-1897

In order to associate the decline of homoeopathy with the decline of Progressivism it is not only important to establish ideological links between Progressivism and homoeopathy, but also to show that such links did not exist with allopathy. Otherwise there could simply be a link between physicians in general and the Progressive ethos (which could be linked to improvement of individuals, for example) or with the medical profession as a whole. In the following section I will consider the ideological links between homoeopathy and the Progressive movement in the areas of their attitude to the poor, alcohol and tobacco use, appeals to the State, political orientation, individualism, conservationism and the Women's Movement.

Just as Progressives saw the fate of the poor as linked to the stability of a future society, so homoeopaths linked their attempts to become more widely recognised with the fate of the poor[27]. Constantine Hering's Domestic Kit, a box of homoeopathic remedies with instruction for their use by the lay - person first produced in 1835, was aimed specifically at the welfare of both the poor and women. In 1868 the A.I.H. noted how two thirds of homoeopathy's patients were women and how their influence within their families and communities by means of the Domestic Kit had been pivotal in homoeopathy's spread. "These women are educating the lower orders of society to the point of appreciating and adopting a better method of cure, and eventually the whole mass will be leavened" the Institute claimed in 1869[28]. In 1868 Dr N.F. Cook in his annual address as President of the Institute claimed homoeopathy should be accorded equal rights (with allopaths). These rights included the "[...] right to spread its beneficent protection over God's poor, in your hospitals and [other] institutions".

[27] Homoeopaths were not alone in identifying their medical efforts with the plight of the poor, as physicians of all persuasions seemed to have noted the link between poverty and disease. Virchow is famously to have claimed that medicine is a social science.

[28] Indeed, there is a sense in which Hering's Domestic Kit which was designed by him to facilitate lay homoeopathic self prescribing was aimed at both the poor, i e. those that could not afford the services of a physicians , the rural, i.e. those who could not physically get access to a physicians and women, in the treatment of their families. The kit comprised of a publication 'The Domestic Physician' and a box of numbered remedies. The book linked diseases, especially those of childhood, with the numbered homoeopathic remedies. Later, the remedies came to be named. Indeed, the success and popularity of Hering's kit was such that even the wives of allopathic doctors were renowned for using the kit on themselves and their children. Coulter (1973) pp 115-117.

Cook claimed that unless "[...] you, the people, see to it that the rights of homoeopathy, and by consequence the rights of the poor, be respected, we shall never gain access to the greatest field [hospitals] for the demonstration of our claims"[29].

Edward Beecher Hooker addressed the Institute in 1907 on the new views regarding the malnutrition of children from the poorer classes. Whereas once it had been believed that malnutrition was the result of direct inheritance and handicap from the parents, research showed that babies of the rich and poor were born in the same state of health and that it was only after birth that poverty, neglect and ignorance took effect. Hooker thus advocated the provision of at least one nutritious meal at school daily for such children cautioning "[...] this is not socialism [...] it is simply carrying further the fundamental idea that it is the business of the state to train its children so that they become good citizens, for the safety of the state depends upon the intelligence and probity of is citizens"[30]. Indeed, they were not socialists, Progressives enacting a system of private welfare capitalism, one that was accelerated after the First World War.

In the early 1870s physicians in general appeared to countenance the Progressive stance on beverage alcohol. In 1872 the A.I.H. adopted the same stance as the A.M.A., claiming that whilst there was dispute regarding the physiological and pathogenetic qualities of alcohol, and the proof of its "drug like" quality, it was resolved that alcohol as a beverage was wholly undesirable and that physicians in their use of it should proceed with caution and use it only sparingly, if at all, and only when considered absolutely necessary. Like the A.M.A. the Institute agreed that;

"[...] no medical practitioner should prescribe Alcohol without a grave sense of responsibility; that alcohol in whatever form should be prescribed with as much care as a powerful drug ; and the directions of its use should be so framed and so explicit that they could not be interpreted as a sanction for excess, or for the continuance of its use when the occasion for its prescription shall have passed" [31].

[29] N F Cook (1868) pp 94-5.
[30] Hooker (1907) p 56.
[31] AIH Transactions (1872) p 36

A few years later the A.I.H. appeared to take a firmer stance on the alcohol question. Placing it on a par with tobacco, the Institute stated;

"The American Institute of Homoeopathy [...] by its emphatic condemnation, in every stage of its progress, of alcoholic stimulants as a beverage, and likewise *by their almost total banishment from the room of the sick*, deserved the thanks of every friend of humanity and should incite to further effort; therefore, [it is resolved] that we, as an association, believing as we do in the physical, mental and moral well being, not only of our members, but of the community at large, do hereby condemn in unmeasured terms the use of tobacco in all its forms, except as a medicine in accordance with the homoeopathic law of cure, believing it to be a fruitful cause of many diseases which afflict the human family, and that we will in all suitable ways discountenance its use" (italics added) [32].

The resolution was adopted[33]. By contrast the A.M.A reiterated its original resolution of 1872 in 1885 showing its position on alcohol remained unchanged.

Thus, the leaders of the homoeopathic profession sanctioned the use of medicinal alcohol in only in a minority of clinical cases. The "alcohol question" almost ceased to be debated. Very few articles appeared in Institute's Transactions throughout the Progressive Era, and few homoeopaths confessed to using it in practice. The casebooks of homoeopathic doctors practicing at the L.H.H. in Britain at the turn of the 20th century shows that they rarely used alcohol in therapy[34].

A cure for alcoholism was even mooted by the homoeopath Frederick Hiller of San Francisco who suggested that the pathogenesis of *hepar sulphuris* so closely matched that of "drunkenness" that it should be considered in treatment of the disease. Hiller claimed, "I have known the appetite for alcoholic drinks to be entirely eradicated by

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[32] AIH Transactions, 27th Session, (1875) p 58

[33] Temperance was not *the* central Progressives concern, but I have highlighted it here as it intersected strongly with medicine. Further research is required into any direct links homoeopathy has with the Progressive Movement, besides the Women's Movement.

[34] It must be pointed out, however, that Dudgeon, in advocating remedies for an irregular heartbeat, did suggest various remedies or "a glass or two of wine" (p 38), and that in the returns from the Ward and Charity hospitals of New York at the turn of the 20th century, one of the achievement of Ward (homoeopathic) was its lesser liquor costs (p40).

its [*hepar*'s] use"[35]. This was significant from the physician's standpoint since both allopaths and homoeopaths recognised that some become alcoholics following medical prescriptions of alcohol, this being a constant source of aggravation to the Women's Temperance Movement. In 1878 the A.I.H. received a communication from the Women's National Christian Temperance Union, expressing their concern over the medicinal use of alcohol, petitioning physicians to be responsible in its use. The A.I.H. expressed concern and sympathy in return, symbolising these sentiments in 1888 with the appointment of a committee to investigate and arrange for the creation of a temperance memorial.

By the early 20th century prohibition was severely restricting physicians' ability to obtain alcohol, which was used in the preparation and preservation of drugs. In 1921 T.H. Carmichael, Chairman of the Institute's Pharmacopoeia Committee, claimed " [...] the present status of the alcohol question, as it related to homoeopathic physicians, is unsatisfactory"[36]. Carmichael complained that a homoeopathic physician who prepared his own dilutions may, after taking out his permit and obtaining his alcohol (a maximum of fifteen gallons in a year) have no further trouble, whereas one who bought his dilutions at a pharmacy was required to complete three forms before being permitted to purchase even half an ounce of dilution. Carmichael noted that nowhere in the United States was a homoeopathic physician required to give a bond when applying for his permit, though there appeared to be some conflict and confusion on this issue between state and federal law. Carmichael suggested that pharmacists should keep a log of the entire amount of alcohol purchased by homoeopathic physicians, in potencies, attenuations and dilutions, so that the government may at any time track the amount being sold to physicians. His suggestion was, however, turned down by D.S. Bliss, the Assistant Prohibition Commissioner in 1921, so that homoeopaths were not relieved of their administrative "burden and annoyances".[37]

Whereas homoeopaths expressed sympathy with the Temperance Movement, the A.M.A. elicited a cooler response. I have been unable to find, for example, any

[35] AIH Transactions (1872) p 42
[36] T.H. Carmichael (1921) p 874
[37] T.H. Carmichael (1921) p 875

record of communication from the W.C.T.U. to the A.M.A. or any response. I have found no support of a temperance memorial or any other symbolic suggestion of support for Progressives here. In fact, the A.M.A. seems to have adopted a contrary position. In February 1885, under the title "Sensationalism and Dogmatism in Sanitary Matters" Henry Leffmann M.D. an allopathic Philadelphia physician addressed the issue of adulterated alcohol, an "excuse" he claimed used by alcoholics who blamed contaminants within alcohol, rather than alcohol itself, for their affliction. Leffmann claimed, "the adulteration of alcoholic liquors is of great sanitary importance [yet] much harm has been done by *well- meaning but misinformed temperance leaders*"[38] (italics added). Leffmann and the A.M.A. seemed antagonistic towards temperance leaders, the former denying the widespread contamination of alcoholic beverages and reserving their right to use alcohol in the sickroom as they saw fit. Leffmann concluded that temperance leaders were prone to "sensationalism and dogmatism" and that those involved in sanitary science should maintain an appropriate "skeptical spirit" in such instances.

Such allopathic "scepticism" sanctioned allopaths' continued, even widespread, use of alcohol. According to Rothstein, some physicians even considered the Temperance Movement a threat to medical therapeutics. A questionnaire sent from the Women's Christian Temperance Union (W.C.T.U.) to the Michigan State Medical Society in 1881 complaining about the "[...] free and sometimes reckless prescription of alcoholic liquors" of physicians met with a hostile response from the society[39]. "The cause of temperance cannot be promoted by ignoring or denying the often proved and constantly recurring benefits obtained from the use of alcohol liquors as a therapeutic agent" the Society claimed.

Similarly, the American historian John Harley Warner has noted that in the 1850s allopaths were using mainly stimulants in their practice, as opposed to depletives used earlier in the century[40]. By the 1860s the most aggressively used stimulant was beverage alcohol, particularly whiskey, wine and brandy, used widely during the Civil War. In 1864 whiskey was the main or sole ingredient in 61.8% of allopathic

[38] J.A.M.A. February (1885) pp 203-4
[39] Rothstein (1972) p 196
[40] Warner (1997)

prescriptions. In hospitals it was used in diseases such as pneumonia, typhoid fever and dysentery. [41]

Rothstein claims after the Civil War Whiskey and Brandy continued to be the allopathic favourites, their use being credited with a whole range of beneficial therapeutic effects, assisted by alcohol's ready availability and relatively low cost. Used in both acute and chronic diseases alcohol was considered to furnish the physician with "[...] the best means of counteracting the depressing action of disease in general"[42]. The most common dose for adults was one half to one ounce of whiskey or brandy every two or three hours, with one physician claiming that in cases of diphtheria he did not hesitate to give children ten to twelve ounces of whiskey a day. Another physician claimed that heroic doses of alcohol in diphtheria were "[...] not only justifiable but almost omnipotent in rescuing the patient from the jaws of death" [43]. Alcohol was also widely used in chronic diseases such as tuberculosis since it was considered to be of nutritional value.

However, whilst allopaths were not swayed by the moral objections from the Temperance arm of the Progressive Movement, they were less able to ignore emerging empirical evidence that alcohol was not a stimulant at all. Indeed, evidence began to appear that the reverse was the case. The J.A.M.A. of 1883 reported the results of experiments conducted by Professor Martin of Johns Hopkins which verified the findings of Lummerberg;.viz, alcohol did not directly affect the rate of beat of the heart. Martin concluded that whereas 1/8 th % of absolute alcohol in the blood had no immediate action on the heart, blood containing 1/4th % by volume almost invariably diminished the heart and that of ½% always diminished it. As A B Palmer wrote in the same year in the JAMA;

"All agree that the ultimate effect of any considerable amount of alcohol is depressing and paralyzing [...] yet many, even medical men, at least by their use of

[41] Warner (1997) pp 98-9
[42] Rothstein (1972) p 195
[43] Rothstein (1972) p 196

language, seem to think that in moderate quantities and as frequently used it is a stimulant [...]" [44].

The Journal further denied alcohol had any nutritive value or ability to avert disease. Citing the sixty- one page pamphlet published by George D Pitzer M.D. of St. Louis the journal presented further evidence for this position from Dr A.W. Nelson of New London, Connecticut. In twenty- eight cases of typhoid fever Nelson had lost no patients. He had made this remarkable achievement with the exclusive use of *veratrum* and no alcohol whatsoever.

However, allopaths resisted this therapeutic change. Not only was this the Expectant Era where few therapeutic alternatives existed, but it was the beginning of bacteriology and allopaths found new justifications for alcohol's continued use. First the investigations of Pasteur, and then Koch, were cited by the J.A.M.A. of 1883 as reason for therapeutic continuity. The journal noted that many physicians were now employing alcohol on the basis of its putative germicidal properties. Worse still from the temperance standpoint, alcohol's germicidal action only operated when large quantities were used. The Journal claimed that a quart, or 4 lbs, of alcohol would be needed to destroy germs –the micrococcus of pus- in a person weighing 160 lbs. The following year J.A.M.A. reported the findings of Dr Blanc of France who had reported positive results of the treatment of acute abscesses with alcohol to the French Association for the Advancement of Science. One pint of alcohol was injected into the cavity and then pressed out so that the alcohol and other matter were exuded. A one-pint injection was repeated and the wound dressed, with another injection the next day if suppuration continued. With this method, Blanc reported, such an abscess healed in 4-6 days, Blanc explaining that rather than the alcohol having no therapeutic benefits, it actually possessed a double action. First, it destroyed the pus already formed. Secondly, its reproduction was prevented by alcohol's action on the capillaries of the abscess. Indeed, Rothstein confirms that the advent of bacteriology increased, rather than decreased, the use of alcohol by allopaths since its in vitro characteristics were erroneously applied to therapeutics, though some allopaths recognised this particular incarnation of false Rationalism.

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[44] JAMA (1883) p 273

Another defensive move made by allopaths was to blame "injudicious" use of alcohol on "quacks" and "irregulars". The JAMA of 1885 admitted that physicians had contributed to "inebriety" but pointed to "one domestic book" written by an "irregular" in which "alcohol was the common remedy" as a source of much of the problem[45]. A further article, considering the merits of saccharated versus alcoholic extracts in "fluid extracts", noted " That many of the more popular quack medicines, tonics and bitters, are essentially alcoholic solutions, varying in percentage of alcohol from 8-45% has been frequently demonstrated by analytic chemists"[46]. A letter to the editor of the J.A.M.A. in 1884 sums up the allopathic position at this time. P.H. Cronin wrote " Abuse of alcohol, opium or tobacco, is no more argument against their legitimate use than citing the gluttonous feasts of classic or medieval days would be an argument against the modest spread of a Chicago physician"[47]. Thus, whilst allopaths were against the use of *beverage* alcohol, they reserved the right of the physician to decide in the sick room on this issue.

Allopaths further tried to distinguish and legitimate their use of alcohol in therapeutics from the inebriety of the age by forming the American Medical Temperance Association (A.M.T.A.) in 1891. Around sixty allopaths originally enrolled in the Association, which was only open to allopaths, for the purposes of advancing "[...] the total abstinence in and through the medical profession, and to promote investigation as to the action of alcohol in health and disease [...]"[48]. It was thought that such an investigation should only be carried out by those abstaining from alcohol so that the results would be "[...] unbiased by any personal considerations of custom or habit, political or religious belief."[49]. The profession clearly felt the need to project an image of temperance to its critics since a truly objective study would have required equal numbers of drinkers and non -drinkers.

The A.M.A.'s move to inaugurate such an investigation is interesting since, seven years previously, representatives of the A.I.H. had investigated the action of alcohol

[45] JAMA (1885) 'Alcohol in the Sick Room' pp 172-174
[46] JAMA February (1885) 'Saccharated Versus Alcoholic Extracts' pp 204-5
[47] JAMA (1884) p 55
[48] JAMA (1891) p 816.
[49] JAMA (1891) p 816

upon the liver and kidneys as well as the abuse of tobacco and drugs in general. Noting both the functional and organic destruction wrought by alcohol the Institute suggested alcohol was a violent nerve irritant, affecting the secretions of the stomach, and causing fatty degeneration of the heart, liver and kidneys. The Institute closed its report on its investigations with the remark that any physician could be excused for carrying "[...] his prohibition tendencies even to the border line of fanaticism"[50]. The contrast between the A.I.H's certainty on alcohol's destructive properties and the A.M.A's. continued resistance to the idea could not be more striking.

In the event, it appears the A.M.T.A. acted as a pacifier to Temperance advocates. Whilst some investigations by the committee were sporadically reported in the pages of the Association's journal it was not until 1917 that the A.M.A. adopted a new resolution on alcohol[51]. Indeed, by this time the A.M.T.A. appears to have gone out of existence since the resolution was suggested by the A.M.A. Council on Health and Public Instruction. It resolved;

"Whereas: It is the unanimous opinion of the Council on Health and Public Instruction of the AMA that alcohol has no drug value, either as a stimulant, as a tonic, or as a therapeutic agent and that it has no food value and;
Whereas: Its use as a beverage or as a therapeutic agent is detrimental rather than beneficial to the individual, therefore, be it
Resolved: That the House of Delegates of the A.M.A. at its 68th Annual Session, declares it is opposed to the use of alcohol by individuals either as a medicine or as a beverage and be it further;
Resolved: That its use in medicine is permissible only in the preparation and preservation of pharmaceutical products."

This resolution came when the influence of the Progressive movement was at its zenith in American politics, but it came forty -four years after the resolution made to similar effect by the A.I.H.

[50] A.I.H. Transactions (1884) 37th session p 188
[51] JAMA (1902) Vol 38 p 1456

Just as with the alcohol issue, allopaths did not have a unified view toward tobacco and this again put them at odds with homoeopaths and Progressives. At one extreme smoking was considered by allopaths to be of prophylactic value. In 1884 the J.A.M.A. cited the opinion of M Pecholier of the French medical journal Montpelier Medical, that "[...] the use of tobacco preserves one from an infinity of contagious diseases"[52]. Typhoid fever was considered the primary candidate, effectiveness against the disease being explained in terms of a ferment, or destructive action, on account of its nicotine content. The Journal further endorsed tobacco by noting that Pecholier "[...] declares a number of smokers have been protected from epidemic influences through tobacco", the editor reasoning that this was perhaps why Willis recommended the use of tobacco in armies, as a preventative against certain epidemic diseases.

More moderate justifications rested upon fine distinctions. The 1885 J.A.M.A. rationalised " Cigars are more toxic than cigarettes, cigarettes than the pipe" [53]. The New York Medical Journal of June 23rd 1883 noted "Cigarettes furnish an inducement to more frequent smoking it is true, but it takes a number of cigarettes to equal a cigar in narcotic effect and being cheaper they are more likely to be smoked in part only than is the cigar and the nicotine is more apt to accumulate in the unsmoked end of either for absorption in large quantities."[54]. Dr Zulinki's findings were cited by the Journal to show that tobacco smoke was an "energetic poison even in small doses" for the lower animals but for men it was only slightly deleterious. The Journal cautioned, however, that its effects were heightened "[...] when the smoker acquired the habit of *swallowing the smoke,* as it is commonly called"[55].

1887 saw the publication of further defences of tobacco. In "Tobacco and Organic Lesions of the Heart" A. L. Lewis and A Jacobi debated the ability of tobacco to cause organic rather than simply functional damage to the heart. Lewis believed there was a certain point at which tobacco consumption became poisonous and produced permanent damage to the heart, whereas Jacobi cited evidence to show that patients

[52] Montpelier Medical Journal cited in JAMA (1884) p 392.
[53] JAMA (1885) p 320 'Tobacco Smoke' italics added. Originally reported in the Medical Journal of Varsonia
[54] Quoted in JAMA (1883) Vol I p 55
[55] JAMA (1885) p 320

who had experienced functional heart disturbances had eliminated such symptoms when tobacco use was discontinued. Jacobi claimed this was "[...] a hope that should be held out to patients"[56].

By contrast homoeopaths cast *tobacco*, like all drugs, including poisons, into two opposing camps; as a dangerous narcotic in crude doses on the one hand, and as a curative agent in dilutions on the other. In 1884 T.F. Allen likened *tobacco* to *arsenic* in that both produced immediate symptoms of acute poisoning, and more remote symptoms of chronic poisoning. Focusing on the latter, Allen noted habitual use of *tobacco* produced marked lesions in the brain, spinal cord and nerves, the circulation, respiration, alimentation and nutrition as well as affecting secretion and excretion. *Tobacco* use further produced, Allen claimed, dullness of mind and depression of spirits, and was thought to have produced at one time eight cases of insanity in the Massachusett's State Asylum. *Tobacco* was also claimed by Allen to change the axis cylinder of the nerves, resembling degeneration like that of *arsenic* and *phosphorus* but not *lead.* In the eye *tobacco* caused dysfunction of the retina and optic nerve, whilst in the ear it produced impairment of the auditory nerve and catarrhal inflammation of the middle ear. *Tobacco*'s affect on the heart was the most well known, according to Allen, its production of a tumultuous and irregular heart beat, vertigo, throbbing temples and rushes of blood to the head and face being well known. In respiration, Allen claimed *tobacco* caused irregularity and dyspnoea, especially at night, as well as disturbances of the gastro-intestinal tract. Allen could not, however, find any evidence of remote lesions nor alterations in the blood as a result of *tobacco* poisoning and the kidneys appeared to remain unaffected " [...] for, as far as I know, no form of nephritis is known to have been caused by *tobacco*"[57].

Still, homoeopaths had not extensively proved *tobacco.* After an initial proving in 1831, published by Harlaub and Trinks, believed to have been made by giving healthy subjects substantial material doses of the drug, *tabacum*'s curative potential had received little attention[58]. Indeed, *tabacum* was no longer listed in the United States Pharmacopoeia, apparently due to the poisonings that had resulted from its allopathic

[56] JAMA (1887) p 525
[57] A.I.H.Transaction (1884) 37th session pp 189-216 (italics added)
[58] 'tabacum' denotes the homoeopathic dilution of tobacco into therapeutic form.

use as a depressant, nauseant and local sedative. In 1906 the homoeopath Charles Mohr called for the American Institute of Drug proving to re-prove *tabacam*, "[...] according to its methods, to give us a reliable pathogenesis, and to settle forever the disputed questions, and, if possible, to arrive at the anatomical or structural lesions on which its subjective phenomena depend, and thus to enlarge its therapeutic sphere" [59]. This was especially necessary since it was considered that poisons made the best medicines, and next to *prussic acid*, Mohr claimed, *nicotine* was the most rapidly fatal poison known.

Like *tobacco*, drugs such as *opium* became a focus of the new moral, physical and social anxieties the Progressive movement represented at the turn of the century. According to Rothstein American allopaths, who used *opium* widely as a painkiller, were almost indifferent to its addictive properties and used it in almost every conceivable illness[60]. Allopaths D W and W T Cathell advised physicians to "[...] carry a supply of morphia granules or tablets with you constantly, and give a proper number of them in an ounce or two of hot water as soon as you reach one of the thousand cases in which great pain is a symptom"[61]. Thus *opium* was used widely, in diseases from inflammations and fevers to insomnia and pains of all kinds. The introduction of the hypodermic injection of the drug during and after the Civil War which eliminated gastric side effects, led to a sharp increase in *opium* addiction. As a result a committee of the American Pharmaceutical Association criticised physicians generally in 1903 for being the main cause of opiate addiction and Terry and Pellens' later study led them to criticise the profession for not bringing the problem of *opium* addiction to the attention of medical students. Publishing their findings in 1928, they concluded that,"[...] the great majority of text books on the practice of medicine, materia medica and therapeutics failed to issue any warning of the dangers"[62]. Physicians resented such criticism of their profession, claiming the lack of government regulation restricting sale of the drug and the widespread use of patent medicines were the real culprits.

[59] Charles Mohr (1906) p 330.
[60] Rothstein (1972) pp 190-194
[61] Rothstein (1972) pp 190-194.
[62] Quoted in Rothstein (1972) p 192.

Once again, the homoeopathic profession parted company with allopaths in their use of *opium*. Whilst acknowledging its utility in material doses for palliative purposes, homoeopaths denied its therapeutic value. Like all drugs in homoeopathic hands *opium* had its own symptomotology and a clearly indicated sphere of use. William Boericke noted in the ninth edition of his "Materia Medica" in 1927 that opium's non-homoeopathic action was as a "[...] palliative only. In great pain, sleeplessness, peritonitis and to check excessive secretion in diarrhoea, diabetes etc"[63]. *Opium* was homoeopathically indicated, on the other hand, in cases of insensibility of the nervous system, depression, drowsy stupor, painlessness and torpor where sluggishness and lack of vital reaction prevailed. Homoeopathic dosage ranged from the 3rd to the 30th and 200th potency whilst the official allopathic dose was one grain, its comprising ten per cent of "Dove's Powder". No cure could be expected from an allopathic dose of *opium* and of course no addiction could be expected from a homoeopathic dose.

Homoeopaths thus agreed with Temperance advocates and others that *opium* was overused. E.B. Nash in the first edition of his Materia Medica of 1898 claimed *opium* was "One of the worst abused, because frequently used, remedies of all schools of medicine" [64]. Nash acknowledged that by "all schools" he meant homoeopaths too though he stated, "The true Homoeopath does not abuse it, but many members of the school calling themselves homoeopaths do". Indeed, Nash admitted that a teacher in one of the homoeopathic colleges defended its use in narcotic doses to produce sleep and relief from pain, adding " I will say just here that any homoeopathic physician that feels obliged to use *opium* or its alkaloid in this way and for this purpose does not understand his business and had better study his Materia Medica [...] or go over to the old school [...]"[65]. Indeed, Nash protested that *opium* did not produce sleep at all "[...] but stupor, and it only relieves pain by rendering the patient unconscious to it". Such stupor often masked symptoms and rendered the case unreadable homoeopathically and thus beyond hope. Indeed Nash believed "The true curative often relieves pain even more quickly than o*pium*, and does so by curing the condition upon which it depends" [66].

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[63] Boericke (1928) p 488.
[64] Nash (1898) pp 344-348.
[65] Nash (1898) pp 344-345
[66] Nash E B (1898) p 345

James Tyler Kent in his published lectures went further in 1900 and specifically cautioned against the use of *opium* even when palliation *was* required, admitting;

"Opium will sometimes relieve pain, stop diarrhoea and mitigate cough, but woe to the patient. It so annuls reaction that there is no possible development of the symptoms that are necessary to indicate what homoeopathic remedy the patient needs, and while the pain is stopped the patient is not cured [...]. When an opiate must be given, let it be clearly understood that a cure of the patient is abandoned"[67].

Thus, whilst it is impossible to state definitively that homoeopaths did not use *opium* in crude doses and thus add to America's narcotics crisis, the homoeopathic profession did speak out regarding its deleterious effects and only recommended homoeopathic use for curative purposes[68]. With such condemnation by the leaders of the profession one would not expect to find many admissions of its use by (implicitly incompetent) homoeopathic physicians. Generally, I have rarely found the recorded use of crude *opium* in homoeopathic case- books and medical journals[69]. In the casebooks of Drs Moir and Epps, for example, physicians at the L.H.H. at the turn of the 20th century, there is no record of the use of *opium* as a painkiller even in their treatment of in-patients. Finally, as mentioned in chapter two, homoeopaths justified their use of the X ray in pain relief on the basis of its desirability over *opiates* and the administration of *cocaine* for inducing anaesthesia via ionisation was considered beneficial since a 1% solution was superior in its effect to larger material doses given intravenously[70]. Thus, homoeopaths seemed to take a stance in opposition to material

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[67] Kent J. T (1900) p 288

[68] *Opium* addiction was a major social issue in America by 1910, with the US importing over twenty times more opium per capita than Germany, Italy, and Austria-Hungary. In 1914 the Harrison Anti-Narcotics Act was passed which effectively made a doctor's prescription necessary for *opium* or *cocaine*. Even so, by 1918 it was estimated there were 200,000 addicts in New York city alone. Morton Keller (1994) pp 115-117

[69] By contrast, homoeopaths carried out physiological experiments with morphine. Blackley's experiments, noted in chapter two of this thesis, were performed with the express intent of determining the physiological action of *apomorphine*, the synthesised derivative of *opium* by Mathiessen and Wright since " [...] differing from morphine in the absence of an atom of water [*apomorphine*] was found to have physiological properties totally different from those of *morphine*, as it produced no narcotic effects whatever, but in their place copious vomiting." [69] Indeed, Blackley's intention was to perform human provings on the new drug and sought the assistance of colleagues, informing colleagues that the crude drug (for physiological experimentation) could be obtained from MacFarlane and Co of Edinburgh whilst the first and third decimal triturations of the drug (for provings) were obtainable from Gould and Son, of Moorgate Street (presumably London).

[70] See p 80 of this thesis.

opiate and *cocaine* use in medicine and this placed them ideologically in step with the Progressive movement[71].

I argue that the moral and ideological resonance homoeopathy struck with the Progressive Movement found a corollary in the political sphere so that ideologically homoeopaths came to be identified with Progressives and allopaths with corporatism in the public consciousness. The last quarter of the 19th century saw unprecedented local and federal state support of homoeopathy in America. In 1871, for example, the Institute received news that appeals to the New York State legislature for the inauguration of an insane asylum had proved successful. Homoeopaths in that state received an appropriation of $150,000 for the institution to which they were able to add $80,000. They had received a rough ride, however, since after Guernsey's bill had passed the Lower house, it was "stolen and hidden three times" and finally found hidden away before it was signed by the Governor[72]. In New Jersey the same year legislative bodies there removed the restrictions place upon homoeopathic physicians regarding their right to dispense prescriptions. Up until that year any homoeopathic physician found doing so was subject to a fine of $50.

The Vice President of the Institute noted in 1886 the continuing aid of the public sector in advancing the progress of homoeopathy. Not only had a Homoeopathic Hospital for the Insane at Westboro been inaugurated by the Massachussetts Legislature, the Ohio Penitentiary had come to be placed under homoeopathic care. This was in addition to the $15,000 given by a unanimous vote of the National Congress for the Washington Homoeopathic Hospital in addition to the $5,000 promised for improvements on the extant building. This sum had been augmented by a further $ 5,000 from the Ladies' Aid Association. In 1897 the hope was expressed that this history of public endowments would be expanded to the support of homoeopathic medical colleges and not simply restricted to the support of hospitals and dispensaries. In 1871 a successful appeal was made to Congress to recognise the professional rights of homoeopathic physicians practicing in the Capital. Showing

[71] One of the apparent contradictions in Progressivism appears to be its simultaneous promotion and critique of individualism. Whereas the rise of the corporations was critiqued due to its infringement upon the rights of the individual and disempowerment through monopoly, Progressives reacted against the rampant individualism they saw characteristic of the American elite and echo from their Victorian roots. Progressives were pro family and pro community, though explicitly anti-socialist.

[72] AIH Transactions (1871) p 547

their connections within the judiciary, Bell noted the involvement of the Hon Morrison R Waite, the Chief Justice of the United States Supreme Court in the Association, along with support from other such notables both in and outside Washington[73]. The judiciary was of course central in the execution of the anti-trust laws aimed at redistributing corporate wealth, and thus at odds with the corporations.

There is some evidence that, by the last quarter of the 19th century, homoeopaths did not share an affinity with Republicanism, which, despite Roosevelt's later formation of the Progressive Party in the run up to the 1912 presidential election, was not the most "Progressive" of the political parties[74]. On 1st April 1882 the medical department of the County of Arapahoe, though strongly Republican as the article pointed out, came under the control of homoeopaths for two years. The performance of homoeopathy was compared to that of allopathy in the previous year. The Institute noted that homoeopaths, in managing the County hospital, reduced the mortality rate by 40%. Further, the cost of such improved treatment constituted a saving on the previous year of $4,182. 76. Despite these gains, homoeopaths were in 1884 displaced by the "old school" which again ran the hospital. The Institute claimed this was achievable only with "foreign aid". The Hon. J A Shreve was not re- nominated for County Commissioner and this was secured only with the help of the clergy who "[...] stepped out of the pulpit and entered the political arena. They were active in the Republican primaries, and in some instances were elected delegates of the County Convention"[75]. Thus, the Institute noted how it took the combined effort of "[...] the old school [...]the powerful Republican party, the Denver University and a strong religious denomination to dislodge homoeopathy from the public institutions of [Arapahoe] County" [76]. However, more research is required to reveal the extent of such political affiliations.

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[73] It appears homoeopaths later lost this judicial connection. See later in this chapter in relation to the corporations.

[74] In the 1912 election both Roosevelt with his new 'Progressive Party' and the Republican party headed by his rival Howard Taft were seen by many political commentators as both being pro-corporatist.

[75] AIH Transactions (1884) p 90.

[76] Whether this political alignment was true of all states however, requires further research. It would be interesting, for example, to determine the political affinities of homoeopaths in the North Eastern seaboard of the United States where homoeopathy was at its strongest at the end of the 19th century. Indeed, the complexity of political affiliations is demonstrated by Coulter's claim that Homoeopathy was associated with the emancipation of women and negroes and with Republicanism, which retarded its growth in the South for a few years but led to its increasing popularity in the North.

A further feature of the Progressive political agenda was Conservationism, another out- growth of anti-corporate sentiment. Whilst McGerr notes the Conservationist movement, as part of Progressivism, was perhaps its least successful policy achievement, it did make some gains, especially in the early part of the 20th century, particularly in limiting deforestation. In line with these developments the A.I.H. passed a resolution in 1899 on forestry expressing particular concern over the impact deforestation had on a consistent and stable water supply for agriculture. The Institute's President Wright did not consider this a matter for committee work but requested the Institute resolve that its members "[...] will, as opportunity may offer, assist in securing legislation for the preservation of forests, and for the reproduction of them wherever needed"[77]. I have been unable to find any corresponding environmental concern among allopaths at this time. However, the area of closest affinity between homoeopathy and Progressivism was in the Women's Movement and this is the subject of the next section.

Advancing the Women's Movement through Homoeopathy.

The admission of women into medical education occurred at around the same time in homoeopathy and allopathy but in significantly different ways. Helen Cook and Frances Woodruff were the first women to graduate from the Western College of Homoeopathic Medicine in 1852. The difference between Western College and allopathic medical schools was that the former was *co- educational.* At this time only two allopathic medical colleges admitted women and both of these were women only colleges; New England Female Medical College in Boston and the Female Medical College of Pennsylvania (later Womens' Medical College of Pennsylvania). Women were further admitted to co-educational homoeopathic medical colleges in 1871 to Chicago, in 1872 to Detroit, in 1875 to St. Louis and in 1877 to Ann Arbor Michigan. By 1875 the homoeopathic faculty of the Boston University School of medicine had fifty -three women enrolled as students [78].

[77] AIH Transactions (1899) p 35

[78] It is worth noting, however, that the liberal faculty of the 1850s associated with the Western College of Homoeopathic Medicine in Pennsylvania was superseded by more conservative elements in 1863 when the admission of women was blamed for lowering the "scientific standard" of the college. In 1867 the faculty sent notes to all its women members requesting their withdrawal. Outrage led to the

Differences also existed in medical society membership between the two schools. In 1869 the A.I.H. resolved to admit women whereas two years later, Alfred Stille, President of the A.M.A., maintained that it was not yet the right time to admit women to membership of the A.M.A. since, "[...] all experience teaches that woman is characterised by a combination of distinctive qualities of which the most striking are uncertainty of rational judgement, capriciousness of sentiment, fickleness of purpose and indecision of action, which totally unfit her for professional pursuits" [79]. Whilst the A.M.A. had to accept women members in 1876 when Sarah Hackett Stevenson attended as the duly elected Chicago delegate, other allopathic medical societies such as the Massachusetts Medical Society and the Washington D C Medical Society did not admit women members until 1884 and 1888 respectively and the A.M.A. did not change its bye-laws on the admission of women until 1915

Anne Taylor- Kirschmann notes that women who became homoeopathic physicians were more feminist in their orientation than "regular" i.e. allopathic, women physicians[80]. The latter often disassociated themselves from suffrage and health reform rejecting behavioural patterns that could be considered "extreme" by their male colleagues. Women were drawn to homoeopathy rather than allopathy not just because of access. When co -education increased in the 1870s in both homoeopathic and allopathic medical schools the numbers of female admissions to homoeopathic colleges increased sharply. Women seemed to have more positive experiences at homoeopathic medical colleges with relations between male and female students as well as faculty being harmonious. Frances Janney, who studied at Boston University, reported her male student colleagues to be respectful and her professors encouraging. By the second generation of women physicians, homoeopathy had a reputation for having a more progressive viewpoint of women in the profession than "regular" medicine. In fact, homoeopathy was associated with radical reform in general, seeking little short of a revolution in medicine. Furthermore, women played a more active role in the homoeopathic medical profession than their allopathic counterparts. From the

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establishment of the Cleveland Homoeopathic Hospital College for Women in the autumn of 1867. See Kirschmann (2004) Further, not all homoeopathic colleges were this progressive. See Kirchmann (2004) p 62.

[79]Quoted in Coulter (1973) p 297.

[80] Kirschmann (2004)

1870s onwards they presented research papers, chaired discussions and published clinical results. Homoeopaths considered women capable of making a significant and unique contribution to scientific medicine, particularly in their provings of drugs.

Furthermore, direct links existed between homoeopathy and female progressive activists. Harriet Clisby, a Boston homoeopath, was the founder of the Women's Educational and Industrial Union (W.E.I.U.) in 1877. Promoting the ideology and politics of sisterhood, the W.E.I.U. challenged class and gender inequalities by actively recruiting women from both the elite and immigrant sectors of the city. The founders hoped women could be convinced of their own value, in turn fostering an interest in others of their sex, regardless of differences in class, race, religion, ethnicity, or perceived morality. Kirschmann claims the founding of the W.E.I.U. expressed one of the major intellectual themes of the Women's Movement in the 19th century – its critique of the inequities inherent in industrial capitalism organised on the basis of individualism and competition. Several of the members of the Board of Directors, such as Julia Ward Howe and Abby May, had also been active in the abolition movement.

Homoeopaths were also intimately linked with the suffrage movement. Martha Ripley, heavily influenced by Safford, became active in the Women's Suffrage Association led by Lucy Stone and Julia Ward Howe, both homoeopathic physicians. Ripley argued in favour of Matrons in the Minneapolis Police, the right of female domestics to unionise and women's right to be elected to Boards of Education. Her most lasting legacy was the establishment of the Minneapolis Maternity Hospital, with a medical department under the control and care exclusively of women homoeopathic physicians. The Board of Directors was also comprised solely of women, including prominent women homoeopaths, suffragists, school board candidates and one lawyer.

Kirschmann claims that, though women's roles as leaders of the Women's Movement and their founding of medical schools and hospitals has been documented, their status as homoeopathic physicians has not been recognised by historians. I would see this as part of the process to repress the memory trace of homoeopathy, initiated originally by the allopathic winners of history and continued in the academy by scholars

socialised into a narrow historical mindset. Kirschmann correctly explains this omission of homoeopathic identity in terms of the "[...] inflammatory rhetoric in contemporary medical publications and articles written by doctors". Her claim is consistent with the one made in this thesis that the terms "sectarian " and "irregular" derive from these sources and serve to augment a sense of homoeopathic sectarian identity that neither women homoeopathic physicians nor their patients actually had. In other words, scholars today claim a physician's identity, as a homoeopath was more important to physicians and patients than it actually was. Indeed, Kirschmann claims "Women with high social standing and secure practices, living in areas where women homoeopaths were equal in number to women regulars, did not consider their association with homoeopathic medicine a disadvantage"[81].

I would go further than Kirschmann, though, and claim that the continued over use of these pejorative devices in the literature also stems, not only from the contemporary marginalisation of homoeopathy in medical literature, but also from historians over-reliance on allopathic primary sources of the 19th and early 20th centuries in assessing the status and form of homoeopathy at that time. There has simply been insufficient research into homoeopathic primary sources when documenting this period in history, which continues to contribute to the skewed assessment of 19th century medicine[82]. I argue that, whilst homoeopaths saw themselves as "doctors" rather than "physicians" (historians over use this term) or "homoeopaths" during the Progressive Era, they also saw themselves as scientific practitioners of medicine[83].

The Flexner report and ensuing medical college closures impacted on women's medical education, significantly producing a decline in women's educational and professional opportunities in American medicine. Whilst the turn of the century had witnessed homoeopathic schools in Boston, Chicago, Cleveland, Kansas City, Philadelphia and San Francisco appoint women to faculties, the merging and closing of homoeopathic schools meant that teaching opportunities and hospital staff appointments for women began to disappear too. Interestingly, Kirchmann notes the link between homoeopathy and Progressivism, though she does not explicitly link

[81] Kirshmann (2004) p 53.
[82] Kirschmann (2004) p 51
[83] Whether they self- consciously saw themselves as Progressives too requires further research.

their respective decline. She does however agree that the decision by homoeopathy's professional leaders to emphasise its similarities with mainstream medicine was *not* a rejection of its separate identity, but "[...] revealed a homoeopathic profession endeavouring to keep pace with the new scientific and professional developments of the Progressive movement"[84].

By the turn of the 20th century Populist demands, the roots of the Progressive Movement, had been so co -opted by the urban middle classes with their political and their moral agenda, that both the Temperance and the Women's Movements had taken on new proportions. This new national, urban basis for Progressive thinking was precipitated by fundamental changes in America' s economy. Continued mediation of class conflict gave Progressivism a new focus- the control of the corporations. This marked the second stage of the Progressive Era.

Progressivism and The Problem of Corporatism 1897-1925

Concerns over the control of big business grew out of both middle class ideals and the economic contingencies of the late 19th century. A period of radical economic transformation in American society, the last quarter of the 19th century saw the ready availability of finance capital, new technologies, abundant raw materials, a national rail network and favourable government policies combining to produce new kinds of companies. The most striking economic transformation occurred, however, in the depression years of the 1890s when debilitating levels of competition meant many small companies struggled for survival. Horizontal and vertical mergers became commonplace so that 1800 companies were converted into just 157 in a seven year period[85]. Thus, 1897 to 1904 came to be known as the period of the "Great Merger Movement". It meant that a few enormous companies controlled the entire manufacturing process from the extraction of raw materials, the production of finished goods, through to marketing, sales and service. Such businesses came to be owned and managed, not by single individuals or families, but by trusts and joint stock corporations. The thousands of people subsequently employed by these giant

[84] Kirschmann (2004) p 113.
[85] Horizontal merging occurs when larger companies buy out smaller ones in direct competition with them. Vertical merging occurs when companies buy out their suppliers.

companies subsequently became the employer of thousands of people which required new accounting techniques, management styles and ownership patterns. The great merger movement enabled John D. Rockefeller to create Standard Oil, James B. Duke to found American Tobacco and Andrew Carnegie to form the United States Steel Corporation. In this new corporate climate Progressive ideals of mediation, association and cooperation took on added significance.

Progressives believed the State and particularly federal law should moderate and regulate the new corporations. Whilst the corporations did not eliminate the small business altogether, nor entirely control the economy, they did command key economic sectors including the supply of food, petroleum, metals, lumbar and paper. Progressives were concerned that such economic giants could ultimately destabilise the economy by raising prices for consumers, raising railroad fares for farmers and small businesses and cutting workers' wages whilst simultaneously demanding greater productivity. Not only did the corporations sustain the upper class with all its decadent social, cultural and political aspirations, it blunted competition and limited individual freedom- two core progressive values.

As well as posing a threat to free and competitive trade Progressives saw in the combinations a threat to democracy itself. As Hofstadter notes, "The Progressive case against business organisation was not confined to economic considerations, not even to the more intangible sphere of economic growth. Still more widely felt was a fear founded in political realities- the fear that the great business combinations, being the only centres of wealth and power, would be able to lord it over all other interests and thus put an end to traditional American democracy"[86]. As well as affecting the small businessman, the lower middle class and those who had inherited the Populist tradition, this fear engulfed urban lawyers, professionals and intellectuals as well as the old political elites. As Wilson claimed in 1912 he was engaged in "[...] a crusade against powers that have governed us- that have limited our development- that have determined our lives- that have set us in a straightjacket to do as they please"[87].

[86] Hofstadter (1962) p 225.
[87] Hofstadter (1962) p 226.

For Progressives the federal State was the final frontier. Traditionally suspicious of authority and mindful of organisations' ability to dominate, Progressives turned to the State only when their preferred routes of voluntary organisation and local state representation had failed. The combinations had emerged quite suddenly whilst the smaller and traditional units of power, reminiscent of earlier in the century, had been in place. Indeed, in 1888 Charles William Eliot pointed out in his celebrated essay that the corporations, as units of organisation, outstripped in sheer size the governments of many states[88]. He noted that one railroad in Boston had 15,000 employees, gross receipts of $40,000 per year and paid its highest salaried officer $35,000. By comparison the Commonwealth of Massachusetts had only 6,000 employees, gross receipts of $7,000,000 and paid $6,500 as its highest salary. And the railroad of Pennsylvania was even larger than that of Boston. Thus as Hofstadter points out, "As units of organisation the state governments were now relatively small enough to become fiefs of the corporations"[89].

The finding of the Pujo Committee reinforced this fear. The Committee revealed in 1912 that the Morgan interests at the peak of the financial system held 341 directorships in 112 corporations, including insurance companies, transportation systems, manufacturing and trading corporations and public utilities, with an aggregate capitalisation of $22,245,000,000. This single network of interests commanded more than three times the assessed value of all the real and personal property in New England, more than twice the assessed value of all the property in the thirteen southern states, or more than all the property in the twenty two states west of the Mississippi. Wilson confessed, " If monopoly persists monopoly will always sit at the helm of the government. I do not expect to see monopoly restrain itself. If there are men in this country big enough to own the government of the Unites States, they are going to own it"[90]. Senator La Follette's salutary note in 1908, that the interlocking directorates of the American corporations meant that fewer then one hundred men controlled the great business interests of the country, had become all too apparent.

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[88] Charles William Eliot "The Working of the American Democracy" quoted in Hofstadter (1962) p 229.
[89] Hofstadter (1962) p 229-30.
[90] Quoted in Hofstadter (1962) p. 231.

With such a stark reality presented to them, Progressives came to see that in the new world the combinations had created, the federal State was the only unit of political organisation big enough to take on the corporations. Fearing the spectre of private more than that of public hegemony, Progressives muted their arch individualism and ironically supported a step in the destruction of the system of local and decentralised values in which they believed[91]. Still, if the power of the federal State had to be increased, one middle class pre-requisite was that it should at least be "neutral", or put another way, realize as fully as possible the middle class preference for moderation, impartiality and law. Thus the State should be neither anti business nor even anti big business, but neutral in mediating the various interests in society, sublimating all to the common good. It should stand indeed where most Progressives stood in the class system- in the middle. Only in this way could the Progressive fears regarding State hegemony be quelled.

In this area also homoeopaths revealed this progressive tension, embracing federal State involvement whilst cautioning against its over use. When J Richey Horner laid the Bureau of Sanitary Science's resolution to the Institute in 1907, Z. T. Miller supported the resolution regarding vaccination and access to education, against the Committee's sentiments "[...] in the interests of civil liberty as against state medicine. Even if I believed in vaccination I should support it" Miller continued "[...] because I hate inquisition. I hate police power in anything but sanitation, and I object to any law that for a single moment stands between your children and their education"[92]. Upholding firmly the principle of individualism Miller continued "A Homoeopathic convention should be the last to uphold medical legislation" because the resolution "demands that in this matter the *patient* and the *physician* shall be assured their constitutional right to select their religion, their politics, their food and medicine"[93].

The resolution was not adopted, as some feared it opened the door for compulsory internal vaccination, something to which homoeopaths objected. The likes of Allen did not see why homoeopaths could not practice vaccination in their own way and come in line with the municipal authorities but Miller reminded the delegates that the

[91] By the turn of the 20th century five political perspectives regarding the control of big business had emerged in American culture. See Flehinger (2003).
[92] AIH Transactions (1907) p 121.
[93] AIH Transactions (1907) p 124.

same "political clique" that had attempted to prevent a separate homoeopathic licensing board were behind the new proposal to link vaccination to access to education[94].

Edward Beecher Hooker revealed this fear of an overly powerful State in his address to the Institute on the problem of child labour in 1907. Recognising its existence in every state Hooker considered that it should be dealt with at that level. Demonstrating the Progressive *ambivalence* to national State intervention he continued, " There is a tendency today to turn over to the national government various duties which were heretofore performed by the states [...] This expansion of national will power will, in my opinion, will prove to be of inestimable benefit to the country, if it is not carried too far and is kept within constitutional bounds"[95].

The 1887 Interstate Commerce Act and the Sherman Anti-Trust Act of 1890 signalled the beginning of this build up of federal State power. Both Acts sought the break up of large corporations and the limiting of monopolies and both were endowed with the power necessary to transcend individual state boundaries, a long time corporate loop-hole. As already mentioned, Theodore Roosevelt, a champion of this conception of the federal State as middle of the road and neutral, completed the first successful prosecution of a single, integrated interstate corporation in 1902. Competition for control of the Northwestern Railroads between Union Pacific Railroad and the Great Northern escalated late in 1901.The contest for stock caused panic beyond the confines of Wall Street so that the combatants, convinced of mutually assured destruction, merged their interests into a single vast firm, the Northern Securities Company. The Governor of Minnesota responded to the widespread public criticism made by North Western citizens of this anti-competitive move by taking legal action. The Roosevelt administration stepped in and on February 19 1902 the United States Department of Justice filed an anti-trust suit against the Northern Securities Company. The Supreme Court ruled five to four in 1904 that the corporation had violated the Sherman Act and the corporation was broken up.

[94] Interestingly, as mentioned on p 86 of this thesis, the District Courts in America consistently upheld homoeopath's rights to use their own products in smallpox vaccination.
[95] Hooker (1907) p 57.

Further prosecutions followed. Notable successes included prosecution of the meat packing companies of the beef trust who attempted to fix prices and restrain competition, and the prosecution of John D Rockefeller's Standard Oil in 1904. Kansas locals asked why Rockefeller paid the state's independent oil producers so little for crude oil and yet charged consumers so much for the company's refined product. Already unpopular with the people for being an aggressive strike- breaker, Rockefeller's company was filed with an anti-trust suit in August 1906 and accused of 1,462 alleged violations of federal law. In 1911 the United States Supreme Court upheld an earlier judgement by the Federal Circuit Court that Standard Oil should allow its subsidiary corporations to function freely and independently and that it itself should go out of business. It was the most famous court directed break up of a corporation until American Telephone and Telegraph almost eighty years later. However, Rockefeller was hardly destroyed. In a perverse historical disjuncture between intentions and consequences, the newly independent Standard companies flourished in the years after the anti-trust suit and sale of stock in Standard's subsidiaries made Rockefeller a billionaire. His emergence from seclusion (initially "on the run" from various individual state legislative bodies) transformed his reputation from monopolistic monster to irrepressible entrepreneur. As Michael McGerr notes, "Rockefeller's massive philanthropy further burnished his reputation. For that matter Carnegie, Harriman, Morgan, Stillman, and all the rest maintained their fortunes, their power, and their standing."[96]

The reason for this lay partly in the fact that the Sherman Act caused confusion. It was left to the Attorney General to enact the law and to Judges to interpret it. The Act disappointed many, partly because it failed to solve the problem of corporate power, and partly because the issue was too complex for a single law. Significantly, the Act, though aimed at trusts and monopolies, could equally be applied to Trade Unions as illegal "restraints of trade", a fact that Progressives were happy given the labouring classes penchant for conflict[97].

The State emerged from such conflicts as "neutral" despite its limitations in curbing corporate excess. Both the Interstate Commerce Act and the Sherman Act gave the

[96] McGerr (2003) p 159.
[97] See pp 197-8

likes of Roosevelt the means to score signal victories of the highest *symbolic* value. Whilst previous presidents had intervened in labour pursuits, they had stood as partisan with the captains of industry not neutrally with the interests of the public in mind[98]. The likes of Roosevelt seemed in the public eye to have risen above the petty squabbles of capital and labour and assumed a position of acting in the public good. When he challenged Morgan, in 1904, over the great railroad merger and the dissolution was upheld by the Supreme Court, Roosevelt won, not a material victory for consolidation continued to advance, but a moral one, since for the first time in its history an American president had done something to ease the public mind on this vital issue. To be sure, as Progressive leaders went, Roosevelt was deeply conservative, yet such legislative achievements earned him an enduring reputation as a "trust buster".

The compensatory move of increased taxation did little more to change this state of affairs in the short term, though its introduction at the federal level provides a key indicator of an American Federal State coming into power and it symbolised perhaps more than any other measure the growing unpopularity of America's wealthy class[99]. In the 1890s fifteen states instituted taxes on large inheritances with more than forty states having inheritance taxes in place by the 1910s. In his annual message to Congress in 1906 Roosevelt called for graduated taxes on incomes and inheritances. In 1909 Congress approved an income tax amendment to the Constitution, which was ratified in 1913 so making taxation a federal issue. The Sixteenth Amendment enabled Congress to place a 1 per cent tax on annual incomes from $4,000 to $20,000 with a surtax on larger incomes. In 1916 Congress raised the income tax rates and enacted the first permanent inheritance tax, including a maximum levy of 10 per cent on estates over $5 million. Over the course of the 20th century such fiscal measures did more than most other measures to seriously threaten the fate of the upper ten. Andrew Carnegie stood alone among the elite in favouring inheritance taxes, believing the industrial leaders needed to recruit talent from the lower classes rather than incestuously from their own ranks and that the rich should engage in philanthropic pursuits. Indeed, Carnegie and Rockefeller were quite clear about their

[98] Hayes intervened in this way in the railroad strikes of 1877, as did Cleveland in the Pullman strike (Hofstadter 1962) p 233.
[99] McGerr (2003) p 98.

desire to give their money away for the "public good" rather than lose their money to the government yet they too were in the minority. .

Despite the limitations of these fiscal and legislative moves, America's elite was under threat. Cornelia Bradley Martin, daughter of a wealthy New York merchant and wife of Bradley Martin, son of an Albany banker, were prominent among America's elite. In the winter of 1897, as the depression was beginning to take hold, Cornelia announced her intention to hold a lavish costume ball at the Waldorf Hotel in New York. Denounced by the Press and clergy as unwise, Martins preacher warned, " Such elaborate and costly manifestations of wealth would only tend to stir up [...] widespread discontent" and cautioned his parishioners, J.P. Morgan among them, not to attend [100]. Increasingly unpopular among the public, vilified by the middle classes and hounded by the courts the behaviour of such elites was perceived as a reckless display of extravagance reinforced their resistance of Progressive values. Frederick Townsend Martin, brother of Bradley, lamented, " I remember, even in my own lifetime, a period when the people of this country looked up with admiration and respect to their wealthy classes. Today how great the change![...] America has learned to hate great wealth [...] public opinion is relentless"[101]. Whilst doubting the utility of philanthropy in maintaining control of America, the route pursued by Carnegie and Rockefeller, the Martins recognised the grave position they and the upper ten were in, and the danger posed by Progressivism, claiming, "That grim truth is that we as a class are condemned to death. We have outlived our time"[102].

The precariousness of America's elite became acute in the years immediately preceding the 1912 Presidential election. By this time the full force of the Progressive Movement could be felt with candidates on opposing political sides running on variations of the "Progressive ticket". In short, all agreed something had to be done about the corporate elite, but what? It is against this backdrop of conflict that the fate of homoeopathic medicine and, in particular, its educational and research establishments, has to be understood. But before outlining these developments, the

[100] McGerr (2003) p 5
[101] McGerr (2003) pp 98-99.
[102] McGerr (2003) p 99

changes in America's political make up, associated with its economic transformation, must be reviewed.

Progressives, Power and the Public: Changing Patterns of Legitimation at the Turn of the 20th Century.

According to Richard Hofstadter, Progressives, despite their self- confident mediation between capital and labour, were themselves a victim of the status upheaval that occurred at the turn of the 20th century in America. Progressivism was in part a response by a class of people who had experienced a shrinkage, not in their material means, but through a changed pattern in the distribution of deference and power, a diminution of their cultural and political influence.

Until 1870 local eminence was what mattered in American society. In the absence of nationwide sources of power and prestige, pillars of local communities were men and women of great importance. Until shortly after 1850 New England society was directed by the professions- lawyers, physicians, professors and merchants- and that direction was in a localised setting. After the Civil War the development of large cities, industrial plant, railroads and the corporation transformed American society and revolutionised the distribution of power and prestige. For one thing there was a massive expansion in the number of millionaires. In 1873 a statistician of the Census Bureau revealed the extent of the concentration of American wealth: 9% of American families owned 71% of the nation's wealth[103]. The old era, dominated by the "mugwump" (the old gentry, merchants of long standing, small manufacturers, established professional men, civic leaders of the old order etc.) passed away. In their political and economic decision making and in their personal, community and career activities these custodians of the old order found themselves "[...] checked, hampered and overridden by the agents of the new corporations, the corruptors of legislatures, the buyers of franchises, the allies of the political bosses"[104]. In this new context, the mugwumps found themselves limited by their own virtues in the struggle, their regard for their reputation and in their social standing itself. Men of the "highest standards"

[103] This is perhaps where the phrase 'upper ten' comes from, used throughout by McGerr and occasionally in this chapter.
[104] R Hofstadter (1962) p 137

came to lack opportunities of the "highest sort", not of the economic kind and not in an absolute sense. Rather, in standing still the old, laissez –faire elite was rapidly, and relatively, dwarfed by the new wealth and power of the corporations and even that was not effortless. Only those elite groups who enjoyed long residency and significant prominence in their local communities managed to maintain their status quo. In the new national arenas of prestige and privilege these traditional luminaries ceased to shine. As Hofstadter puts it, at this time "[...] every fortune, every career, every reputation, seemed smaller and less significant because it was measured against the Vanderbilts, Harrimans, Goulds, Carnegies, Rockefellers and Morgans"[105].

Men of the mugwump type flourished between the 1870s and 1890s most conspicuously around Boston, also the period of homoeopathy's zenith and a place of strong homoeopathic presence. (Conrad Wesselhoeft was Professor of Materia Medica and Therapeutics at the University of Boston in the last quarter of the 19th century). For such men, Hofstadter claims, the ideal leader was a " well-to-do, well educated, high minded citizen, rich enough to be free from motives of what they often called 'crass materialism', where family roots were deep not only in American history but in his local community"[106].

This is a significant point since, in their seeking to re-prove the homoeopathic materia medica at the turn of the 20th century, homoeopaths conceived of a national, if not international, project yet appealed to local sources of influence for funding. Howard Bellows, President of the A.I.H. said in 1900;

"It is no longer possible for it to be carried out by a few representative men throughout the country. It involves a distinctive working organization [...] Is it not better that we seek to make it as general and widespread as possible? Is it not better to look for the necessary funds to private sources, or to the faculties of our medical colleges who may disburse sums specially raised and entrusted to them for this purpose [...]"[107].

[105] R. Hofstadter (1962) p 138
[106] R. Hofstadter (1962) p 140
[107] M.H.R. Sept 1st (1900) p 532

Bellows explicitly added in 1903 that funding from some source could be expected in a time of substantial investment by Government, the Carnegie Institute and the Rockefeller Institute for Medical Research into medical science, though it was not expected from these sources particularly but from some "[... large- hearted and broad-minded man, blessed with ample means at his command [...]"[108].

Similarly, Joseph P Cobb, President of the Institute, showed an anti-amalgamation stance in 1903 when he stated:

" It is true that the tendency of the age in manufacturing and commercial pursuits is toward amalgamation and the formation of trusts. Does it necessarily follow that a consummation of this tendency is for the best interests of the people and of the world? Under what conditions did these industries become world powers? Competition and a determination to surpass all competitors" [109].

Cobb showed such individualist and Progressive sentiments informed his view on amalgamation of the A.I.H. with the A.M.A .He concluded, "Healthy and generous competition in all pursuits is desirable. I believe that it would be an unfortunate thing for the art and science of medicine should there cease to be two distinctive schools"[110]. In this he repeated the views of Seldon H Talcott expressed in 1898 in relation to the issue of the amalgamation of medicine. Reminding delegates of the higher duties of the profession to "[...] inculcate liberality, and at the same time to restrain license [since] unjust repression of individual or cooperative rights is being vigorously assaulted all along the lines of human progress"[111]. Homoeopaths' contribution to this progress was two fold. First, homoeopathy should remain separate from allopathy so that "[...] striking comparisons are made, stimulating criticisms are involved, new experiences are unfolded; and by competition, by comparison, by criticism, by emulation, and by attrition every side of the shield is not only more carefully examined, but more brightly burnished" [112]. Secondly, homoeopaths were obliged to create "[...] a correct public opinion by means of

[108] TA.I.H. (1903) p 173.
[109] T.A.I.H. (1903) 59th session pp 32-33
[110] T.A.I.H. (1903) p 32.
[111] Talcott (1898) p 29.
[112] Talcott (1898) p 30.

properly disseminated truth"[113]. Indeed, homoeopaths should "[...] compel (not by law against free speech, but by *public sentiment and public demand*) the would- be critics of homoeopathy to learn something of their subject before attempting to pass an opinion upon it"[114](italics added).

There is a sense then in which the debate at the turn of the 20th century between homoeopaths and allopaths regarding the amalgamation of the two schools can be viewed as part of the wider Progressive debate over the problems of combinations. The debate over amalgamation was not simply about similarities in medical practice, or science, which A.M.A. members often used as a justification for amalgamation and for the A.M.A.'s representation of physicians at the national level, especially to Rockefeller. Rather, to take a stand for or against amalgamation in medicine represented an expression of political ideology as much as anything else. Cobb and other prominent members of the Institute once again displayed in this instance a greater resonance with Progressive anti-trust sentiments rather than with the corporations, whilst Bellows showed that the old power structures were still being appealed to for funding and legitimation. Talcott indicated popular public support was still being relied upon to maintain and advance homoeopathy's political progress.

It was in part these differential power bases that explain allopaths' successful project of increased professionalisation. Whilst both homoeopaths and allopaths had professionalised throughout the 19th century, creating medical associations, colleges, journals and clinical specialisation, neither had been able to secure a monopoly over medical practice. As late as 1890 much of the medical market remained unregulated, with state licensing being introduced first in New York with separate licensing boards for allopaths, homoeopaths and eclectics, followed soon thereafter by the states of Pennsylvania, Virginia, Illinois and others[115].

The licensing debate showed the necessity for joint as opposed to single licensing boards and the inability of the allopathic profession to bring about changes without the cooperation of the homoeopathic profession. What allopaths needed was a new

[113] Talcott (1898) p 31.
[114] Some things don't change! Talcott (1898) p 31.
[115] Prior to the latter 19th century the diploma received upon graduation from medical school also served as the licence to practice. See Coulter (1973) pp 313-315

power base and superior political connections. This they set about achieving in the early 1900s. In 1899 George H Simmons was appointed General Secretary and Manager of the A.M.A, a post he held until 1911. At the same time Simmons was editor of the Association's Journal and remained such until 1924. These dual arenas of influence enabled Simmons to make significant and lasting changes in the way the A.M.A. operated. In 1901 Simmons instituted a new constitution and by laws to the A.M.A. These new directives introduced by the Committee on Organisation over which Simmons presided as secretary, meant that only representatives from state medical societies (as opposed to city, state and county societies, as previously) could be represented at the Association's annual meeting of the House of Delegates. In addition, and very importantly, the new regulations stated that only one member was required for every 500 members of each medical society. This led to the House of Delegates shrinking from 1500 to 150 members. Further, it was recommended that state societies should divide into a general meeting and a house of delegates of not more than 50 or 75 members with the county and city societies represented in the latter on the basis of one delegate for each 100 members or part thereof.

Not only did this reduction in size enhance the decision making power of the Association's legislative organ, but it gave a stronger voice to the smaller societies. The large urban societies often had more representation than their own or other state societies, which confused the representation process and as Coulter notes, gave undue weighting to Progressive sentiments since, "[...] urban societies were inclined to be more liberal and progressive in their medical policies than the county societies, more liberal than the A.M.A.s office in Chicago desired"[116] A recruitment drive was also instituted, since it was calculated that only 35,000 of the 110,000 allopaths in the country were members of the A.M.A. These changes were the beginning of a new basis of organisation and professionalisation for allopathic physicians and represented a move toward larger, more corporate-like Association membership whilst simultaneously being a move away from direct, popular, democratic self-government[117].

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[116] Coulter (1973) p 427.

[117] This was not allopaths' first attempt at monopolisation . See Coulter (1973) for the A.M.A.'s failed 1848 attempt to 'improve' medical education through a separation of teaching and licensing. The Committee set up to investigate the situation issued a minority report which central theme was the centralising reported in by centralising

By contrast, homoeopaths did not see the need for the same kind of re-organisation. When William Boericke called for a strengthening of the Institute in 1907 he had in mind increased recruitment of students to homoeopathic medical schools via tracts and existing practitioners, rather than any change to the organisation's internal arrangement[118]. Indeed, homoeopaths appeared generally disinterested in society matters. Royal Copeland complained in 1912 that homoeopaths in America had no political platform so that it was not obvious what they actually stood for. Busy in practicing medicine, the majority resisted extensive involvement in medical politics and many were not members of the Association at all. A paper read before the Homoeopathic Medical Society of Kansas and Missouri noted in 1910 that homoeopaths generally would not do anything for the Institute or the profession even though (or perhaps because) they were financially more comfortable than their allopathic counterparts. To redress matters, the Institute elected a Field secretary in 1910, which reported after two years of travelling the country a widespread apathy toward organisational matters among homoeopaths. They seemed to believe that "Similia is a mighty truth and cannot die"[119]. Somewhat predictably, the Institute voted in 1911 against the appointment of a permanent field secretary to be paid for by Institute funds.

These disparities between homoeopaths and allopaths in organisational form also possibly highlights, not only that homoeopaths were ideologically associated with Progressivism, but that they were associated with the more populist incarnation of the movement. Progressive ideology could broadly be divided into two camps. At the left of centre was the Populist variant, which championed in the Jacksonian spirit the intelligence of the populace and their ability, indeed right, to manage their own affairs. Associated with William Jennings Bryan Populist Progressivism saw the major political questions as moral questions and thus the intuitions of the people were as good as almost any degree of experience. Even Wilson believed what was needed was a "[...] government in the world where the average man, the plain man, the common man, the poor man had a voice equal to the voice of anybody else in the

[118] Boericke (1907)
[119] Coulter (1973) p 441.

settlement of the common affairs"[120]. This faith in the average man was often coupled with an attack on political organisation, the evils of the world being seen as a result of over not under organisation. Keeping the Progressive flame of individualism burning brightly, Populist Progressives believed man acted best as an individual, free from the influence of self- interested parties and machines. True democracy was considered to be the rank and file control of organisations, the town meeting being the principal trope and direct primary being the chief embodiment of these sentiments.

Right of centre were those who considered the only way to institute progressive values and curb financial and political excesses were in new forms of political organisation. Notions of responsible leadership emerged from the mugwump belief in the integrity and effectiveness of elite leadership. Louis D. Brandeis and Theodore Roosevelt represented this side of the political spectrum and called upon lawyers to assume a position of independence between the wealthy and the people in order to moderate the excesses of each. The power of the corporations and bosses was considered a symptom of the weakness of the political executive and elected officials. The representatives of the people thus required more power not less to take on the corporate giants in an increasingly complex social order.

I argue that this new basis of professionalisation for physicians centred round new forms of organisation rather than the standardisation and lengthening of medical education as this had already been largely achieved. Coulter has claimed that allopaths through the A.M.A and its political connections with the Rockefeller G.E.B and Abraham Flexner succeeded in formulating criteria for assessing medical schools which favoured allopathic ones over homoeopathic. However, there is evidence to show that there were fewer differences between the educational curricula of homoeopathic and allopathic schools than has been supposed. Indeed, authors such as Coulter and Nicholls argue mainstream homeoopaths "sold out" in coming to so closely resemble allopathy.

Coulter and Brown cite further evidence that the conflict between allopathy and homoeopathy became part of the battle over capital. Whereas Coulter argues

[120] Quoted in Hofstadter (1962) p 260.

Rockefeller and Carnegie followed the A.M.A/Flexner criteria in their allocation of funds, Brown claims it was the other way around[121]. Rockefeller and Carnegie had already decided who would receive funds and the Flexner report simply served as a legitimating device. Brown claims the remarkable coincidence between the medical professions (he is technically only referring to allopaths here) and Flexner's recommendations can be explained, at least in part, by the close relationship Flexner enjoyed with the profession. Simon Flexner, Abraham's brother, was director of the Rockefeller Institute for Medical Research, the country's leading medical research institute. Both Brown and Coulter note that Abraham Flexner consulted with the A.M.A. throughout Flexner's investigation. Indeed, Brown claims it was explicitly understood from the outset that the Carnegie study would be "[...] part of the council's campaign lending credibility to the council's plans for reforms"[122]. Six months in advance of the report being published, on November 4th 1909 Henry Pritchett, president of the Carnegie foundation, sent a letter to Arthur Dean Bevan, head of the A.M.A.s permanent Council on Medical Education since 1904. The letter read in part;

"In all this work in the examination of the medical schools we have been hand in glove with you and your committee. In fact, we have only taken up the matter and gone on with the examination very much as you were doing, except that as an independent agency disconnected from actual practice, we may do certain things which you perhaps may not. When our report comes out, it is going to be ammunition in your hands"[123].

Brown and Coulter both conclude that the reorganised, centralised A.M.A., was used by the foundations to transform the medical profession as a means of furthering their own ends. I would add to this that the foundation's campaign has to be understood as part of its defence against the Progressive onslaught on corporate America. By the time the conflict for control of America was in full swing, allopaths and homoeopaths were in very different political and ideological positions. Homoeopathy had demonstrated an ideological resonance and identity with Progressive ideology and

[121] E Richard Brown (1979)
[122] E Richard Brown (1979) p151.
[123] E Richard Brown (1979) p151.

remained dependent upon old, localised power structures whilst the A.I.H. retained its traditional organisational structure. Allopaths on the other hand, through a reorganised A.M.A. and their access to the legal system, had made themselves useful to outside corporate interests and actively cultivated corporate connections.

Signalling these changes from local to national bases of power and legitimation Benjamin Bailey addressed the Institute in 1905, claiming, "It is a short story, a tale that is soon told. The homoeopathic profession is practically without corporative recognition, and today corporate interests rule the world"[124]. Bailey asked whether, as the corporations had been accused of "having no soul" and possessing " a lack of personal responsibility" whether or not in their "[...] failure to employ to a greater extent the members of our school of medicine was something to which homoeopaths themselves had contributed and whether, by extension, homoeopaths could and should attempt to rectify this lack of corporate representation[125]. Bailey claimed the corporations were acting *ultra vires* and, in not employing homoeopaths in their ranks, were failing to act in the interest of the public good [126].

Bailey claimed the homoeopathic profession had a particular responsibility to represent the poor and demand their restitution especially through the municipal corporations. Highlighting the statistically proven relation between morbidity/ mortality and poverty/deprivation, which discounted the significance of individual action or inaction, Bailey claimed it was little wonder that "[...] the taint of anarchy clings to these people [the poor] in their desire to throw off a depression of economic carelessness which means death"[127]. Such economic carelessness Bailey attributed to the municipal and other corporations, the fate of the immigrant Italian in the poor tenement block, the result of "legal evasions allowed by criminal municipalities" corresponding in the private sector to the "[...] death of no small per cent of 422 passengers and 3,520 employees killed by the railroads in the United States in 1903"[128]. Bailey claimed homoeopaths were ill placed to influence such statistics since they were absent from the corporate corridors of power. By contrast;

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[124] A.I.H. Transactions (1905) 'Homoeopathy and the Corporations ' Benjamin F Bailey pp 91-105
[125] Bailey (1905) p 91
[126] *ultra vires* Latin literally 'beyond the powers', or, beyond ones legal power or authority.
[127] Bailey (1905) p 92
[128] Bailey (1905) p 93

"Scarcely a legislature convenes that has not in its personnel one or more of the members of the so-called regular school of medicine looking after the interests of the representatives of the A.M.A. The city health officers, the county health officers, the railway surgeons, the staffs of the great public hospitals, are practically all from the other school. What does our intelligence, our wealth, our philanthropy net the public while we are without political and, hence, without corporate influence?"[129]

The reason corporate interests in America turned to the allopathic medical school " [...] for the equipment of their medical departments" Bailey explained in terms of the strength and the mutual protection ethos of the A.M.A. and other allopathic medical societies and their strong presence " [...] in every municipal circle, in every court and in every medical circle." Linking this with the need for the corporations to protect their interests through the legal system Bailey asked;

" What more natural than that the corporations should draw their men from an organisation which is so strong that their own medical department, and hence their own corporation or business, may be protected in the courts because of the associate influence and organization of the school to which the representatives of their department belong"[130].

In short, corporations favoured allopaths, less because of their medical advances, and more because of their influence in the legal system, one of the means of Progressive attack on corporate power, and their relative political capital, bestowing upon the corporations needed legitimacy. Bailey lamented homoeopaths would not be employed by the corporations " [...] unless we can demonstrate to them an *equal*

[129] Bailey (1905) pp 92-93 A second way in which the homoeopathic profession had lost the public was in the decline in the supremacy of the law of similia. Bailey claimed that varying from fifteen to thirty years previously many leaders in the profession had made it their business to publicise statistics demonstrating the superiority of homoeopathic treatment. Bailey explained this in terms of improvements in allopathic treatment, including the adoption of homoeopathic methods, along with the failure of homoeopathy to improve its Materia Medica in line with modern methods. In the latter, Bailey considered professional homoeopaths to be criminally negligent.

[130] Bailey (1905) pp 95-96

support in the many cases which are brought to the courts for jury or judicial consideration [...]"[131](italics added).

Even representation in the life insurance world Bailey claimed had declined in the previous five years. As well as legal leverage, corporate approval of homoeopathy could be facilitated by a greater loyalty to the principle of similia and the development of homoeopathic science, Bailey claimed. A union between allopathic and homoeopathic professional bodies was desirable in his view since the old school " [...] look to us today to define and give to them the therapeutics of the future"[132]. Such was possible due to the respect members of the allopathic profession now accorded those homoeopaths of undoubted ability and reputation, C. E. Lane in the ensuing discussion confirming " We have no trouble getting along with our allopathic neighbours at all"[133].

Yet, Bailey also believed that the homoeopathic profession's power within corporate America would only come from popular support of homoeopathy, from the people. In as near an affirmation of Progressive ideals as one is ever likely to glean from medical society minutes, Bailey stated in his closing comments "What makes politics is this: to have something to present to the people that will give us recognition with the people and to have back of us the people that hold the votes. My distinguished townsmen, Mr Bryan, said he had everything at times that he wanted except the votes of the masses"[134]. Presumably an allusion to the Populist, political advocate of Progressive values, William Jennings Bryan, both Bailey's political philosophy, as well as the absence of homoeopaths in corporations suggest homoeopathy's ideological affinity in the public consciousness was with Progressivism and not with the corporations.

In the years after 1905, the hopes of Bailey and those like him were dashed. The battle between corporate America and the Federal State reached its height in the run up to the 1912 American presidential election campaign and represented a period when corporate America considered itself under serious attack. Wilson's victory was,

[131] Bailey (1905) p 96
[132] Bailey (1905) p 100
[133] Bailey (1905) p 103
[134] Bailey (1905) p 104

according to Hofstadter, a foregone conclusion and America's economic elite realised that change was inevitable. Flehinger confirms that Wilson's election victory represented both an important transfer of leadership in political Progressivism and an overwhelming ratification of the Progressive Movement. Taken together Roosevelt and Wilson captured 70% of the popular vote, which represented an overwhelming call for reform, or 75% if the 900,000 votes (6 %) cast for Debs were taken into consideration. The election result represented an indication of the unpopularity and fear surrounding the new corporations and the upper ten could be forgiven for fearing their end was nigh.

The Empires Strike Back: Corporate Philanthropy and Rockefeller's Reform of Medicine

Rockefeller Jnr. and Frederick Gates, head of the Rockefeller philanthropies, both explicitly feared the loss of their capital. Philanthropy became their most effective defence mechanism[135]. On June 2nd 1901 the Rockefeller Institute for medical research opened, heralding a commitment to attacking a range of diseases, seeking their chemical and biological etiology, developing methods of prevention and cure and training hundreds of researchers for medical science. It was the last commitment in particular that probably had the greatest impact on homoeopathic medicine. Over the next three decades Rockefeller would donate $65 million dollars to the Institute and become the largest single source of capital for the development of medical science in the United States. Medical education became transformed on a "scientific" basis and public health programmes were instituted in both the U.S. and elsewhere. Whilst Rockefeller Senior, who patronised homoeopathy all his life, insisted that homoeopathic institutions and educational establishments should not be ignored in the funding rounds, Rockefeller Jr. and Gates had other ideas. Convincing Rockefeller Snr. that sectarianism in medicine was obsolete and that the new "scientific" medicine was the way ahead, Gates and Rockefeller Jnr., via their Board of Education and their association with the A.M.A., starved homoeopathic medical colleges of funding. The

[135] The steel magnate Andrew Carnegie also contributed enormous sums of money to medicine but Rockefeller remained the single biggest donator to medicine. Carnegie believed in not passing his wealth on to his children, for fear of ruining them but also that talent should be pooled from the lower classes, believing this was vital to capitalist innovation. Carnegie alone favoured inheritance tax and by the end of his life had given away over 90 per cent of his fortune.

report of Abraham Flexner in 1910, which investigated the conditions of all American medical colleges, allopathic, homoeopathic and eclectic, gave an objective gloss to the Rockefeller agenda. By ranking colleges according to facilities it gave apparent justification to the funding of allopathic colleges at the expense of homoeopathic.

The primary instrument in this corporate survival strategy was the full time plan. This was a contractual obligation entered into by medical faculty to become fully salaried employees of the medical school whilst relinquishing all private practice, which had traditionally supplemented medical educators' incomes. Gates, Rockefeller and Flexner desired that full time faculty should be dedicated to teaching and research alone, and thus "academic medicine" was born. However, it is less the plan itself, and more the selective form of its implementation, that is instructive. Rockefeller and Gates policy in relation to the plan show their position and objectives- to counter the State's attack on their wealth and provide a means of national political influence to counter the federal governments increasing power.

After the successful establishment of several private medical institutions Rockeller, Gates and Flexner turned their attention to public institutions, to what Flexner called the "strategic" schools of the West and South. Flexner complained;

" In the East medical education is altogether in the hands of privately endowed institutions of learning. With the exception of some eight or ten schools, medical education in the West and South is in the hands of state universities. [...] It is evident, however, that if Mr.Rockefeller's benefaction is to be made generally effective, cooperation with state and municipal universities is necessary"[136].

Flexner stated more candidly, "We are trying to aid in the development of a countrywide, high grade system of education in the United States. If we confine our cooperation to endowed institutions, we can practically operate only in the East"[137].

The conflict between Gates and Flexner over this issue brought into focus the former's philanthropic motives. Whilst Flexner favoured the expansion of the

[136] Brown (1979) p 177
[137] Brown (1979) p 178

Foundation's activities to include state institutions Gates was wholly against such a move. Gates never could square the provision of financial gifts to State universities with his loathing of State and federal inheritance taxes. He seemed aware of the fact that State medical schools in 1923 were receiving fifteen times more funds than they were in 1900. These institutional gains were the foundations' loss since this, along with a threefold increase in the State's wealth, was funded largely through inheritance taxation. In Gate's view the foundation funding of State universities, locally or federally funded, amounted to cooperation with the State whose taxation policy was "designed to confiscate between them the whole of very large fortunes"[138]. The only Rockefeller wealth safe from such confiscatory moves was that deposited within the foundations. Donations to State universities was thus, for Gates, tantamount to conspiring with the enemy.

The Rockefeller foundation, under Gate's direction pre World War I, can thus be seen to have been on somewhat of an anti State crusade. Whilst Gates opposed endowing public institutions, a policy upon which he was finally defeated, his desire was that the upper ten, under threat from taxation, anti-trust laws and socialist principles, should gain a foothold in every part of the nation. What better way to achieve such influence than to use an existing institutional apparatus covering every state? The financial and ideological sponsorship of allopathic medical schools amounted to a parallel inter -state corporation, taking the Rockefeller influence to every corner of the country without serious threat from an anti-trust suit.

Testifying to these motives Gates claimed in relation to investments in private medical institutions, "[...] we must seize the centres of wealth and population"[139]. Gates and the foundation desired that, society's needs, as defined by them, would prevail over the medical profession's interests. To this end such centres were crucial in the support of universities and colleges, student enrolment and most importantly, the symbiosis between medical educational institutions and the local business class. This latter factor was particularly crucial "[...] for influence, for usefulness and for every form of power" [140]. Gates further admitted that funding carefully selected

[138] Brown (1979)pp 178-9
[139] Brown (1979) p 179
[140] Brown (1979) p 179

medical colleges could "[...] preserve and mass our income [...] on the strategic points of ever increasing and cumulative power"[141]. This was especially important after the 1907 de Landis anti trust judgement, that Gates lamented to Rockefeller Snr was a judgement based upon, not. "[...] the voice of reason, of enlightenment, and least of all of a deep-seated sense of right in public things [but one of] reckless greed to lay violent hands on other people's property"[142].

Also, it was hoped such endowments to medicine would encourage both financial donations and personal involvement from the local business class. For Gates and Rockefeller the financial stability such foundation and local business support would produce would keep the universities and the colleges out of the hands of the people, demonstrating that foundation policy was a direct defence against State, and thus, Progressive attacks on corporations. These attacks Gates knew could become more intense. He claimed:

" If the test should ever come, the power that will act most effectively to preserve the State institutions will be private and denominational colleges and universities amply endowed and holding and teaching truth whatever may be the passion of the hour, and ultimately *directing popular opinion* into right channels"(italics added)[143].

Gates predicted it was the private foundations that would guide the universities in such circumstances which would be "everywhere numerous and free". Such a system would, "[...] so enlighten and direct opinion at all times that there can never ensue a conflict between the democracy and its state universities"[144]. Indeed, such attempts to control public opinion were cited by George Vincent, the Rockefeller foundation president in 1917, as the source of much resentment against the foundations. Vincent's hope was that a formal statement to the contrary would allay public fears of social and political control.

In view of the Gates dominated G.E.B. pre- war policy of funding only private institutions then, it is significant that of all the university affiliated medical colleges in

[141] Brown (1979) p 180
[142] Brown (1979) p 182
[143] Brown (1979) p 182
[144] Brown (1979) p 180

homoeopathic hands, only that associated with the university of Boston was privately endowed. Homoeopathic medical educational faculty in Michigan, Iowa, Ohio, California, Nebraska and Minnesota were all affiliated to state universities. In view of the foregoing I would suggest this was another reason why homoeopathic medical colleges were sidelined in the Rockefeller spending round. In short homoeopathy did not possess the correct political credentials.

Whilst many university and college faculty embraced the full time plan in exchange for much needed funds to satisfy the "scientific" recommendations of the Flexner report, some of the more elite institutions mounted successful resistance. Colombia and Harvard in particular staunchly opposed corporate influence through the full time plan, objecting to the subsequent contractual obligation to operate under a fixed corporate policy. In essence, they saw it as money in exchange for academic freedom Such faculty further feared any future successful attacks of the corporations, on which they would become voluntarily dependent under the plan and maintained their right to augment their incomes through lucrative private practice.

On the occasions the G.E.B. did give money to state universities at this point, it was conditional upon foundation control of the relevant faculty. In the case of supporting selected Southern state universities, the G.E.B. named their professors of education and defined their duties. Still, Gates could not overtly run institutions as socially fundamental and visible as universities and colleges and was thus always, reluctantly, dependent on local business leaders in each state to do the foundation's bidding.

Only after the war, and the change in relations between corporate America and the State and the closure of all but two homoeopathic medical educational schools, did the Rockefeller foundation turn its attention to widespread funding of state universities. The policy change developed as a result of Rockefeller Jnr. and later members of the G.E.B. no longer sharing Gate's fears regarding State misappropriation of the Rockefeller fortune[145]. After Gate's defeat by the Board over the University of Iowa proposal Raymond Fosdicke, a new member of the GEB, claimed, "[...] Gates did not understand the progressive forces which, even as he spoke, were converting the great

[145] Gates was chairman on the GEB until 1917 when he resigned from the executive committee of the Board over this issue and reversals over the full time plan.

State universities into the social and scientific laboratories they have become." Accordingly, in 1925 the foundation's Education Board permitted the University of Chicago to accept the full time plan whilst simultaneously allowing "[...] full time clinical faculty to receive no fees for patients seen in the university's teaching hospitals but allowing them to continue to engage in the private practice of their professions outside the university hospitals"[146].

Whereas before the war Gate's policies had placed the Rockefeller foundation in direct opposition to the State and its medical educational institutions, after the war many of the foundations adopted the rhetoric and policies of corporate liberalism. Under Gates, the early policy of the G.E.B. had successfully taken the influence of America's economic elite to the wealth and population centres of the entire Union by investing in an alternative, legally immune, corporate structure- allopathic medical education. Post War, with the rapid dismantling of the Progressive "war machine" by Wilson and the following Republican administration many foundation leaders, notably Rockefeller and Carnegie, felt simultaneously less threatened by the State and more willing to accept that funding public universities strengthened rather than weakened their influence. Nevertheless, these were simply different means to the same end. Gates' original policy of defending corporate interests through the funding of medical education continued well into the 1920s[147].

The seeds of a changed relationship between the State and the corporations, realised in the 1920s were actually sown before the War. In 1907 in the midst of a stock market crash the State had turned, not to Progressives, but to the corporate elite to stabilise the market[148]. It was ironically, the success of the war effort, dependent as it was upon the sequestering and federal coordination of corporate activities that brought the Progressive Era to an end. One can only speculate how, had the war not erupted when it did, or had America been spared the expense and burden of

[146] E Richard Brown (1979) pp174-5

[147] Anti-trust campaigners failed after World War One because the Republicans were swept into power, the pre war stock market crashes had shown the symbiosis between corporations and the State, and successful management of the war itself had necessitated the very sort of corporate industry progressives had previously opposed. Ideologically the war had compromised the progressive conscience and it became a failed social movement which itself has experienced significant recovery only in recent years.

[148] See McGerr (2003) pp 178-181

intervention, the corporations may have not fared so well. Likewise, after the war the corporations came to see the value of the State's role in rationalising markets, industries and social and educational institutions, something the War had accelerated. Further, foundation leaders had come to trust the professional classes to do their bidding. The creation of "academic" medicine produced new loyalties, with professionals faithfully implementing foundation policies in return for employment security, funded research and increased career opportunities. For this reason even Andrew Carnegie dropped his opposition to including state universities in his foundation's retirement plan in 1908.

Conclusion

At the turn of the 20th century the central issue on the American Progressive political agenda was the control of corporate business. This battle between the federal State and Capital over who would rule America, climaxed in the Presidential election campaign of 1912 and was resolved during the First World War. During this period of conflict the funding of allopathic medical educational institutions was a political manoeuvre made by the Rockefeller philanthropies under the direction of Frederick Gates to counter the State's attack on corporate wealth and influence. Through taxation and anti-trust laws Progressives, both local and federal states sought to curb the massive fortunes of the new corporations and redistribute wealth to stabilise America's precarious economic, social and political fabric. Channelling their profits into the reform of medical education gave America's corporate elite the means to extend their social and political influence in such a way as to evade anti-trust legislation and rescue the tarnished reputations of the "robber barons". Gate's "full time plan", whilst being self consciously political, was legitimated by the appeal to supporting "scientific medicine", such an allegiance being more an effect than a cause of change.

It is broadly agreed by historians that Rockefeller changed the face of medicine for his own political ends. The connection between Flexner, Rockefeller, the A.M.A. and the subsequent medical educational reforms in America has been well documented by others. What has received less attention is the differing moral and political ideologies of allopathy and homoeopathy at this time. I have argued in this chapter that

American homoeopaths possessed an ideological resonance with, first the Populist Movement of the 1870s and then the Progressive Movement of the early 20th century, and its Populist arm at that. These differing ideological affinities between allopaths and homoeopaths can be seen when analysing key moral and political issues within the Populist/Progressive agenda. Both Progressives and homoeopaths took a stance against alcohol, drug use and conservationism. Both advocated equal rights for women. More research is required to determine whether there were direct political links between Progressives and American homoeopaths besides those relating to the Women's Movement.

Gates and Rockefeller sidelined homoeopathy not because it was "unscientific" (though they no doubt perceived it in these terms) but because it did not fit in with their wider agenda of social control and economic protection, and because ideologically homoeopaths sat on opposite side of the political divide. Homoeopathic medical colleges were not excluded from the Rockefeller fortune because they were markedly different in their curriculum content or laboratory facilities from allopathic ones, because they were not very different in these areas. I have no doubt that Rockfeller Jnr. and Gates did have a prejudiced attitude toward homoeopathy but I also doubt they were the science gurus Brown makes out on the strength of a single reading of Osler's, albeit seminal, work. Rather, a high proportion of homoeopathic medical colleges were in the public sector and were thus of less utility to the philanthropies. Moreover, homoeopathy's traditional base of legitimation, the "mugwump", with his localised power structures and networks of influence, had been swept away with the Great Merger Movement of the 1890s. In its stead sat the inter-state, national power bases of the corporations, eroding too the influence of the professional middle classes and the small business.

What happened in medicine occurred in other sectors. Law changed in the new social and industrial conditions. One prominent American lawyer said at the beginning of the 20th century, " The lawyer's former place in society as an economical factor has been superseded by [the corporation] this artificial creature of his own genius, for

whom he is now simply a clerk on a salary" and Loius Brandeis said "We hear much of the "corporation lawyer" and far too little of the "people's lawyer" [149].

Whilst the corporations were not totally secure until after the First World War, when corporate America had been mobilised for war time efficiency, the period of most intense insecurity for them were the years leading up to the election of 1912, the very years when the Flexner report was commissioned and funds allocated. America's economic elite felt under serious threat and prepared to wage battle for control of the nation. Once that battle was won, its theoretical affiliation with allopathy, its translation of political motives into intellectual conviction, was irrelevant. It is no accident that, after the First World War when the apparatus of Progressivism was dismantled by the new Republican administration, the foundations extended their financial support to state medical institutions.

With the defeat of Progressivism and the decline of homoeopathic medical education, closure was achieved and many of the issues of the preceding century ceased to be debated. Yet these dilemmas did not disappear. Today, with spiralling costs, the inappropriateness of the magic bullet in chronic disease, and debilitating and life threatening drug contra-indications, there is a restoration of these repressed historical memory traces to public consciousness. In the conclusion I will outline what a restoration of 19th century homoeopathy might mean for contemporary medical science.

[149] Hofstadter (1962) pp 160-161

Conclusion

In this thesis I have argued that medicine could have developed differently. I have based this argument primarily upon the recovery of homoeopaths' science programme. I have also argued that the unresolved medical debates of the late 19th and early 20th centuries between allopathy and homoeopathy suggest an alternative future trajectory for medical science is possible, one based upon homoeopathic principles.

I showed in chapter two that in the 19th century homoeopathy was part of science, particularly between 1870 and 1890. Homoeopaths were engaged in an experimental research programme, introducing the first single blind trial with placebo and performing their own physiological investigations into drug action, even on animals. They pioneered therapies such as nitro- glycerine for heart disorders and *tuberculinum* for respiratory diseases as well as medical diagnostic technologies such as the portable sphygmograph and introduced many new drugs to medicine. These innovations by homoeopathic physicians were *credited at the time* as having contributed to scientific progress in medicine, but have since been repressed from the collective historical memory trace.

In chapter three, and with an emphasis upon the United States, I explained that, rather than homoeopathy declining in the early 20th century because it was not scientific, or because it did not engage with science, homoeopathy declined for other, non- clinical reasons. Whilst other historians have also made this point arguing the reason for homoeopathy's demise was due to various political and economic reasons I have argued, as a first concluding point, that homoeopathy suffered a severe epistemological crisis in the 1870s as the result of two experiments that elicited negative results along with negative microscopical analyses. This had far reaching and long lasting implications for homoeopathy, especially in the U.S. I showed that, whilst homoeopaths in America responded to such error inadequately, allopaths in America, and both groups of physicians in Britain, tolerated error well. These differences in response I suggest may be the result of the different authority structures, external and

internal boundaries within the two American medical national societies but that this requires further empirical confirmation.

One direct consequence of American homoeopaths ineffectively handling error was that provings were never taken outside the field of general practice into proving colleges, an idea that was mooted in the mid 1870s. As Mary Douglas points out, for a high grid/group arrangement (which American homoeopaths possibly had) to be transformed into a low grid/group one, that is from a stable group stifling originality, to a more open structure where dialecticism is encouraged, a redistribution of power is required. In Douglas' words "The big push that changes classification must be big enough to redistribute power as well"[1]. I argued that removing provings from the sphere of medical education and the general practitioner's office was a necessary component of this shift, but one that did not materialise.

If provings had been removed from the hands of general practitioners then it is conceivable that homoeopathy may have developed a stronger institutional base and stronger external connections. Indeed, I showed that such overtures were made to the A.I.H. in the last quarter of the 19th century from the American Ophthalmological and Otological Society, but because provings did not become a specialism in their own right, homoeopathy's institutional position *outside* of education and general practice was not strengthened. Wesslehoeft's "failed" experiments, and the aborted attempt by American homoeopaths to set up proving colleges, severely undermined homoeopathic epistemology during its period of greatest influence so that both the number and the status of provings, homoeopathy's scientific epistemological base, declined sharply.

In chapter four I undertook the first of a three- part analysis of knowledge production by American and British physicians with the aid of Berger and Luckmann's social constructionism. My second concluding point is that, despite homoeopaths' superior therapeutics, as measured by their performance in infectious epidemics and hospital records, allopaths were better at explaining homoeopathic medical successes in terms of their own universes of meaning. In this way allopaths cognitvely colonised

[1] Douglas (1996) p 64

homoeopathic medical knowledge, translating the *vis medicatrix naturae* into their own world view, even though homoeopaths were in many ways better placed to do this than allopaths since the concept of the reverse action of drugs was one implicit within homoeopathy from the very beginning.

In chapter five I extended this analysis with a specific case study investigating the ways in which allopaths and homoeopaths treated tuberculosis. My third concluding point is that whilst their therapies differed in the 1860s and 70s, with the rise of bacteriology, allopaths found a linguistic and conceptual means of adopting homoeopathic theory and practice without acknowledging its homoeopathic lineage. Thus, in relation to their treatment of tuberculosis, allopaths came to translate the homoeopathic principles of similia and the minimum dose into allopathic concepts that made sense in their universe of meaning..

Finally, chapter six produced my fourth concluding point, that homoeopathy and allopathy at the turn of the 20th century became entangled in a battle between the State and the corporations in America, with homoeopathy having an ideological resonance with the former and allopathy with the latter. I suggested that the Rockefeller philanthropies financed allopathic medicine at the expense of homoeopathic (and other) medical institutions, translating their economic and political agenda into the scientific vision of allopathic medicine, financing a nationwide allopathic network of medical schools enabling J.D Rockefeller Jnr. and F. T. Gates to invest their millions in a tax free, national, parallel corporate structure immune from anti-trust law. Furthermore, I have argued that allopaths were at odds with Progressives on certain key moral issues and suggested that this translated into political ideology and affiliations. Homoeopathy on the other hand, whilst possibly not directly politically affiliated with Progressivism, possessed an ideological resonance with it, and as a result suffered at the hands of Progressivism's enemies. Direct political links may emerge in future research. This is a significant part of homoeopathy's history recovered. In the next section I will show how such a recovery addresses contemporary medical concerns and goes some way to resolving the historiographical problems for homoeopathy outlined in the introduction.

Resolving the Five Historiographical Problems for Homoeopathy

My first historiographic point is that, by emplotting my narrative along Tory, Organicist lines I have countered the continued Whiggism in the history of *homoeopathic* medicine. This manifests itself mainly in the inability of most historians to imagine a different outcome in history, leading to linear tales of triumphalism and the failure to even *ask*, let alone answer, the question of whether medicine could, or should, have developed differently[2]. This possibility has been lost to history because history has been written by the winners (allopaths) and academic underlabourers (whig historians) and, post closure (c. 1920s), fundamental conflicts, along with the *victor's failures*, have been collectively repressed.

I argue that homoeopathy's demise at the beginning of the 20th century was not inevitable. Homoeopaths were engaged in a systematic and scientific experimental research programme at a time when allopaths were reciting anecdotes from distant lands on the uses of arsenic among Himalayan nomads. I suggest homoeopathy constituted a "scientific discipline" at this time whereas allopathy did not [3]. Homoeopaths' main research agenda at the end of the 19th century involved the re-proving of drugs subjectively and objectively, using chemical, microscopical and laboratory analyses of human tissues and fluids. Both human and animal trials were a part of homoeopathic epistemology. Where they were unable to conduct their own trials, homoeopaths gleaned information from allopathic and other medical journals, especially records of drug poisonings and results of pathological anatomy. As a result, the homoeopathic materia medica came to be organised according to signs and symptoms manifested in body systems. Unfortunately, the full potential of this research programme remained unrealised for the reasons mentioned above.

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[2] Nancy Tomes is a case in point. In 'The Gospel of Germs' (1998) Tomes recounts the death of Martha Roosevelt, wife of philanthropist Theodore Roosevelt Senior, from typhoid fever, "the filth disease", in 1884. The historical dilemma for Tomes centres around the fact that, though Martha Roosevelt was known for her fastidious cleanliness, adopting an exacting regimen in her household of polishing, scrubbing, cleaning and dusting, she should succumb to ' te invisible agents of disease'. (p 25) Rather, Tomes question should be, since the etiology of diseases like typhoid was attributed to germs and since such germ free people succumbed to the disease whilst other 'germ ridden' folk did not, why did the general public not question the veracity of germ theory? Why did they not consider it based on a fallacy when the pattern of disease did not conform to the theory's predictions?

[3] I take 'discipline' here to denote "the cultivation of a consistent perspective by adopting a language and techniques that focus the inquirer's attention, generally to the exclusion of other potentially observable matters." Fuller (1993) p 2 of Chapter 4 .

Neither was homoeopathy antithetical to public health. Hahnemann had originally set down in the Organon that, wherever possible, the maintaining cause(s) of a disease should be removed in order for treatment to be successful. The combination of public health official and homoeopathic practitioner was not uncommon. Homoeopaths subscribed in the main to public health principles but used dilute rather than material drugs where prevention failed. As part of the public health programme, homoeopaths were not anti- vaccination per se since all homoeopathy was claimed to be vaccination of a kind. In those U.S. states where vaccination became compulsory for access to State services, homoeopathy fought long, hard and successfully for their own vaccination procedures to be used in place of allopathic scarification and injection [4]. The homoeopathic preparation *variolinum* used to vaccinate against small pox, still in use today, originates from this time period.

Homoeopaths adopted and adapted new diagnostic and therapeutic measures, some of which came from within allopathy (anaesthetics, the stethosope) and some that came from outside medicine (bacteriology, x rays, blue light)[5]. Surgery is seen as one of medicine's great achievements and in many cases homoeopaths were instrumental in pioneering that progress because they were engaging with "science", in its many incarnations, and made contributions that were acknowledged at the time. For example, William Tod Helmuth, a homoeopathic surgeon and Head of Surgery at the Homoeopathic Medical College of New York, performed one of the first antiseptic operations. Rothstein claims Helmuth's educational role would probably have led him to introduce anti -septic techniques to his students. In chapter five I argued that the cross pollination from homoeopathy to allopathy, principally via medical journals, in defiance of the consultation ban, paved the way for the micro dilutions of bacteriology to become accepted into allopathic practice.

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[4] See, for example, The Homoeopathic World November 2nd (1908) p 489-501 'Internal or Homoeopathic Vaccination : The Victory in Iowa' by John H Clarke MD. In this paper Clarke recalls the success of homoeopathic i.e. non intravenous vaccination against small pox..See Coulter (1973) pp 298-305 for homoeopathic involvement in public health initiatives. Whilst the homoeopathic literature is full of references to problems with unsanitary living and working conditions etc, Coulter emphasises those such as the homoeopath Dr Tullio Suzzara Verdi (1829-1902) who combined a public health appointment with homoeopathic practice.

[5] See for example AIH Transactions (1907) pp 897-905 'X Ray as a Pain Sedative' by A E Smith from Freeport , Illinois and 'The Roentgen Ray in the Treatment of Skin Diseases' by Stephen T Birdsall from Glen Falls , New York in the same volume pp 906-918

My second historiographic point is that, to counter archival negligence, I have focused upon homoeopathic primary clinical sources. I have approached the literature *with the expectation* that homoeopathy had its own science research programme and its own conception of what scientific medicine should be. Historians socialised into Whig and Prig traditions are not going to look for something they do not believe to be there. With this approach I have discovered the experimental programme of homoeopaths, the ideological nature of the term "regular physician" used by most historians as a supposedly neutral referent to allopaths the adoption of homoeopathic *theory and practice* by allopaths, the importance of language in this synthesis, and the significance of medical theory in handling error facilitating an illusion of epistemological cumulativeness[6].

My third historiographic point is that, along with these methodological shortcomings, archival negligence reinforces medicines inaccurate recounting of its own past. Thus, extant general medical history books make only fleeting references to Hahnemann and homoeopathy, if they are mentioned at all, which leads to the chronic underestimation of homoeopathy's contribution to medicine and science. This is reinforced by the fact that historians have focused upon the social history of homoeopathy and not its clinical practice. This is itself a product of the *history of the history of medicine* and the result of historians' disapproval of the doctor centred historical narrative. Warner particularly criticises this emplotment, used by the sociologist Paul Starr for example in his argument that science gave doctors cultural authority. Like Starr I focus on the role of the doctor in medicine since most 19th century homoeopaths, even those expanding the material medica and those advancing medical technology and considering themselves "scientists" were concentrated in private general practice[7].

[6] Indeed, the historical neophyte can readily determine the ideological orientation of any monograph presented to her on this subject by the appearance of the term "regular" in the text. I defend my use of "allopath", with all its pejorative connotations, on the basis of homoeopathy's current marginalisation and in order to give homoeopathy parity with biomedicine.

[7] Warner (2004)

My fourth historiographic point is that the differences between allopathy and homoeopathy at the end of the 19th century were primarily *rhetorical and linguistic* not therapeutic or theoretical. Only by returning to the archives with the right mindset can the *practice* of medicine be distinguished from such (misleading) historical *representations*[8]. This finding represents a twist to the Babel thesis which claims that groups of rival scientists routinely misunderstand each other. In the case of medicine it was less that the two groups of doctors didn't understand each other and more the case that identical practices were masked by differences in linguistic representation. At a higher order cognitive level the concepts and theory they were using were mutually translatable. Russell Hanson claims scientific theory is little more than the linguistic codification of a scientist's belief structure[9]. This is a position with which I am in agreement. In this instance the practices of allopaths and homoeopaths were similar yet their beliefs and codifications were different. In fact, I would suggest scientific language is also a codification or representation of *identity* and disagree with Warner that medical *practice* determines identity. Rather, I argue practice is underdetermined by language, in that different language codifications can refer to the same higher order concepts and practices. In this way, and certainly in the historical example portrayed here, divergent theories, languages and identities mask identical practices[10].

Whilst acknowledging similarities between the two practices, historians have put them only to Whig and Prig use, the possibility for a contingent historical argument being lost in the process. Coulter and Nicholls, in particular, draw attention to the similarity between homoeopaths and allopaths but cast it in Tragic terms seeing homoeopathy's similarity to allopathy as something which disadvantaged the former and a principal reason for its decline[11]. What they have overlooked is the extent to which first, homoeopathy influenced allopathy, secondly, that homoeopathy did not

[8] A difference arguably existed between allopathy and homoeopathy on the theoretical level in so far as their language was different since theory is defined by language. However, the medical concepts expressed through different linguistic systems were the same as evidenced by their similarity of practice.

[9] Russell Hanson (1958)

[10] Contrary to a recent negative review an article of mine received it is not that difficult to distinguish between language and practice in this way. It is clear when reading a journal what refers to clinical practice and what is merely rhetorical i.e. designed to persuade.

[11] Though Coulter and Nicholls claim homoeopathy and allopathy were virtually indistinguishable clearly Rockefeller and Carnegie could tell them apart!!!

mimic allopathy, but rather allopathy actively *colonised* homoeopathy, and thirdly, how the science homoeopaths were using to legitimate and advance their practice has been subsequently superimposed by historians retrospectively upon "unscientific" allopathic practice or deemed an obvious "dead end".

In another diachronic move, historians admit that homoeopathy affected the decline of heroic medicine (but no credit for that since even 19th century allopaths admitted that) in the security of the knowledge that this event is *sufficiently far away from the present.* To reverse this move and claim homoeopathy laid the ideological groundwork for the acceptance of bacteriology by physicians via the concepts of minute doses and vaccination, increases homoeopathy's influence in history and links it more closely with current notions of "science"[12]. Thus, in keeping with White's typology, I have brought contingency into the picture as befits an Organicist form of argument, one which emphasises integration over dispersion.

My fifth and final historiographic point is that Internalism still pervades most narratives in this area as it is implies there always was (and is) something intrinsically "wrong" with homoeopathy. Homoeopathy's metaphysics is appealed to in order to make it appear incommensurable with pathology, physiology and anatomy. Simultaneously, contradictions in allopathy are rarely alluded to. There is an interesting parallel here between what historians of science do to failed scientists and what historians of medicine do to homoeopathy. In the former case, failed scientists become "philosophers" whilst in the history of medicine homoeopaths become "metaphysicians". So, Descartes, Hobbes and Liebnitz as natural philosophers on the losing side of intellectual battles are seen as "philosophers", not "scientists", whilst Hahnemann, Burnett and Kent are portrayed as high potency, metaphysical, and spiritual "physicians" rather than pioneering scientific medical men or even just "doctors"[13].

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[12] Historians such as Warner (1998) claim homoeopathy lost its identity at this time because it lost its distinctiveness from allopathy, as allopathy renounced its sectarian nature and became 'scientific', so homoeopathy lost its 'otherness'. But Warner continues to claim that homoeopathy defined itself in relation to allopathy alone. I disagree. Homoeopaths were not interested so much in a homoeopathic identity, or in a status as the 'other' but in securing a scientific identity.

[13] For more on what the history of science does to failed natural philosophers see Steve Fuller (2002) pp 392-409

This historiographic problem in particular is predicated on a series of dubious dualisms. One such is the "high/ low split" in homoeopathy put forward as a cause of its internal incoherence and ultimate demise[14]. It has to be borne in mind that the "high" group in America who formed the I.H.A. were always a tiny minority compared to the "lows" and for that reason its likely that this institutional split had little impact on homoeopathy's decline. Historians have overplayed this split since, as I have shown, the "highs" continued to present papers at annual conventions of the A.I.H. as well as publish in the mainstream homoeopathic journals and belonged to both medical societies[15]. The highs did not completely reject pathology and physiology as I have shown with Kent's paper on the significance of pathology for knowing the complete pathogenesis of a drug. The split of the I.H.A. away from the A.I.H. in 1880, following as it did hot on the heels of Wesselhoeft's failed experiments, had more to do with medical epistemology and error elimination than with simply high and low dilutions. The I.H.A. held to the view that subjective provings were reliable and the cornerstone of homoeopathic materia medica, subjective idiosyncracies included. They did not spurn pathology or physiology but provings were their primary epistemological tool. The A.I.H. on the other hand wanted to address the problem of error within the materia medica, standardize provings, incorporate objective and measurable "signs" and eliminate much idiosyncracy. They sought rational evidence of the veracity of homoeopathic claims e.g. statistical comparisons, microscopical and spectral analysis, diagnostic technologies etc whereas the I.H.A. prioritised clinical and bedside findings. The A.I.H.'s objective was to prove to the wider medical community and significant political authorities that homoeopathy was effective, whereas the I.H.A seemed unconcerned with this.

Furthermore, historians portray the highs (who did not make institutional advances) as using nosodes (live disease products) and sarcodes (healthy human tissue products) whilst the lows (who did make institutional advances) did not. This is also misleading.

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[14] Coulter (1973) and Nicholls (1985) argue this particularly.

[15] In 1880 the I.H.A had 70 to 80 members whereas the A.I.H.had 8,000 to 10,000 members (Coulter 1973 p 334). Julia M Green, for example is listed as a member of the AIH in 1907 membership having begun in 1898. Though she formed the Federation after this date it is evidence of 'synchronicity' in historiography that she is thereby connected with the split of the IHA from the AIH in 1880. Green clearly did not abandon her AIH membership when the purists were active. She was a high potency advocate within the AIH.

I have used American society transactions and British hospital case books to show that low potency prescribers, even in institutional settings (portrayed by historians as the centre of low prescribing), used both the high and low potencies of animal, vegetable and mineral substances as well as the nosodes and sarcodes. Similarly, highs did not reject pathology and physiology. Both groups of homoeopaths were in fact "omnidilutionists", that is, they used the whole range of potencies. Thus, I argue that the "internal" problems of homoeopathy have been given too much prominence by historians, even those sympathetic to homoeopathy, in their explanations of its decline.

Another result of historical repression is that homoeopaths themselves have a poor sense of their own history[16]. Today, homoeopathy is commonly, though not exclusively, practiced in the U.K. and U.S. in the "classic Kentian" way - that is one high dose with a long action, not repeated until the action of the drug has ceased. Homoeopathy is considered to have "reverted" to a "purer" form of practice in the 20th century. Today's homoeopaths generally pride themselves on closely following Hahnemann's principles in such prescribing. In the last eighty years homoeopathy in the west has become associated with "New Age" medicine, with a spiritual overtone. Homoeopathic identity now rests, *prisca sapienta*, with original writings rather than with contemporary "science". However, the irony is that, a closer analysis of Hahnemann shows that he did not necessarily advocate much of current homoeopathic practice. He was no "spiritualist", paying little attention to dreams, mental and emotional symptoms, emphasising the physical symptoms and physiological basis of drug prescriptions. Further, records show Hahnemann came to individualise less on the first prescription, almost always giving *sulphur* in the first instance. The highest potency Hahnemann ran up was the 190th centesimal, nowhere near Kent's 10 M, CM and MM. This, of course, is understandable in view of the fact that dilution and succussion was performed by hand in Hahnemann's time. Nevertheless, to portray Kentian homoeopathy as "spiritual" and a purer version of Hahnemann's practice, or as a natural successor to the latter, is quite wrong. The putative metaphysical aspects of the work of both Kent and Hahnemann are

[16] An area of further research could be the clinical progress of homoeopathy.

emphasised to legitimate contemporary homoeopathic practice but it should be remembered it is a path homoeopathy may not have taken.

Tory Historiography and Finding a Place for Homoeopathy in Contemporary Medicine.

This brings me to the central Tory question-What effect can the recovering of homoeopathy's history have on the future of medicine? First, it should be clear by now that the homoeopathy I am recovering, defending and advocating is that of the past, not the present. To a large extent the form of homoeopathy advocated by the A.I.H. at the turn of the 20th century no longer exists. That being the case, how can I connect the past to the future? Because I have recovered the similarity between homoeopathy, allopathy and science at the end of the 19th century I have made it *dissimilar* to its present incarnation. Continuity exists between the past and future. The present disappears. Do I then lose my political platform for future action? Is there any evidence that there is room for homoeopathy to expand its influence in the future? Who, today, would be the natural custodians of this kind of medical practice?

The genesis of a response to these issues lies in the nature of the repression. Many of the significant running medical disputes between homoeopaths and allopaths at the end of the 19th century were never resolved but ceased being debated. Periodically these issues resurface, providing researchers with phenomena they cannot explain and problems they fail to solve. Consequently, just as Mach's recovery of past objections to Newton paved the way for the Einsteinian revolution in physics, so a revisiting of unresolved 19th century medical epistemological debates holds the key to resolving problems plaguing contemporary medicine.

What are some current medical problems? Allopathy today is accused of being overly concerned with diagnostic and therapeutic interventions which have raised costs. The development time of new drugs has increased, reaching ten years by 1978, with costs rising sharply from £5 million per drug in the 1960s, to £25 million in the 1970s and £150 million by the 1990s[17]. Some developments have been described as "halfway

[17] James Le Fanu (1999) pp 246-7

technologies" which prolong disabled lives without curing [18]. Iatrogenic disease and death, reminiscent of the heroic age in mid 19th century medicine, have returned late in the 20th century as testimony to the lack of satisfactory resolution[19]. Added to these issues are new problems of Multiple Drug Resistant (M.D.R.) diseases, increasing chronic diseases where the "magic bullet" approach has proved inappropriate, and the growth of mental health problems[20]. This crisis is compounded by the fact that only 11 % of (allopathic) medical graduates enter careers that are exclusively or significantly devoted to research. It is a crisis those within the allopathic profession are well aware of[21]. As the J.A.M.A. of 2002 noted this vital group "holds the future of medicine in its hands"[22]. What is needed then is not "[...] patient-oriented translational clinical researchers, who apply findings derived in basic science to the development of new understanding of disease mechanisms, diagnostics and therapeutics". This has been the medical paradigm for over eighty years. A *new* approach to drug research is needed, one that can involve both laboratory investigations and human provings, because medicine's current crisis centres around an old 19th century chestnut- the relationship of drugs to disease.

Contemporary cancer therapy typifies the return to heroic medicine with its attendant problems. Ralph W Moss, an independent researcher recently claimed;

"Conventional cancer therapy is so toxic and dehumanizing that I fear it far more than I fear death from cancer. We know that conventional therapy doesn't work-if it did, you would not fear cancer any more than you fear pneumonia. It is the utter lack of certainty as to the outcome of conventional treatment that virtually screams for more freedom of choice in the area of cancer therapy. Yet most alternative therapies regardless of potential or proven benefit, are outlawed, which forces patients to submit to the failures that we know don't work, because there's no other choice"[23].

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[18] B.M. J. (1997) :315 : 1551 6th December p 1
[19] Ivan Illich (2001).
[20] The W.H.O. calculates that depression accounts for 20 % of disease burden in European countries.
[21] As outlined in chapter one.
[22] JAMA 287 No 18 May 8th (2002) p 1
[23] Found at www.shirleys-wellness-café.com/breastcancer.htm Ralph W. Moss PhD is an independent researcher who has been investigating cancer treatments since 1974. He is former science writer and assistant director of public affairs at Memorial Sloan-Kettering Cancer Centre in New York (1974-77)

When drugs whose efficacy is predicated on R.C.T. s, are discovered by allopathy their *total* sphere of action is seldom known. Stringent trial procedures since the *thalidomide* disaster has meant fewer drugs have come onto the market. From a 1960s high of seventy drugs per year, the 1970s saw only thirty new drugs introduced, many simply more expensive replacements for older and cheaper medications. The American Food and Drug Administration (F.D.A.) insisted recently that drug manufacturers add black box warnings to their packaging of anti-depressants due to evidence they could induce suicidal behaviour in some patients. Eli Lilly, aware of the potential for *prozac* to produce suicidal tendencies banned its derivative *paxil* for those under eighteen years of age. In 1999 *raplon* (Organon Inc.West Orange N.J.), an injectable anaesthetic used to relax muscle in surgery, was withdrawn since it was found to cause bronchospasm, an inability to breathe normally that can be fatal. Similarly, *lotronex,* (Glaxo Wellcome Inc.- now Glaxo Smith Kline, Research Triangle N.C.) used in treatment of irritable bowel syndrome in women, was withdrawn in 2000 because of the risk of intestinal damage from reduced blood flow to the intestine (ischemic colitis) and ruptured bowels. *Propulsin* (Janssen Pharmaceutic, Inc Titusville N.J.), for treatment in nightly heartburn, was withdrawn in 1993 due to a risk of fatal heart rhythm abnormalities[24]. Homoeopaths have long argued that it is the fact that drugs can cause disease that makes them curative. From this perspective it makes sense that anti- depressants can cause suicide, that *Raplon* as a relaxant can cause muscle spasm, *lotronex* as a treatment for I.B.S can cause ischemic colitis and *propulsid* as a heartburn treatment affects the heart's natural rhythm.

This problem is not simply one of corporate greed (or incompetence). It is an epistemological crisis. Scientists and industry observers claim that, despite long trials, a newly marketed drug has only ever had 3000 people exposed to it. Raymond Woosley, Director of one of the U.S. centres that studies drug side effects claims we can never know *all* the toxicity that will occur, especially the 1 in 10,000 or 20,000 who could be harmed by it. This can only be known after the drug is on the market and exposed to huge numbers of patients[25]. But the problem is qualitative not

[24] See at <www.fda.gov/fdac/features/2002/102-drug.html>

[25] The continued use of allopathic drugs known to *cause* disease, whilst anticipated by homoeopathy, is legitimated within allopathy by risk factor analysis.

quantitative since *the pharmaceutical industry and allopathic medicine still do not understand the true nature of drug action.* In fact, according to the likes of Raymond Woosley *total drug action cannot be known.*

The human genome project is often seen as the answer to these problems. We hear of the prospect of individualised and tailor made drugs, the project being able to "[...] raise new insights into disease and *may* allow effective treatments where none currently exist" (italics added) may be frustrated[26]. Even if such treatment should transpire, the cost will no doubt give rise to continuing ethical decisions surrounding the rationing of scarce resources. But the genome project could add to the problems of health care in the way that bacteriology and more recently in the U.K. the implementation of the National Health Service did by raising public expectation and increasing the disease market[27]. Moreover, the massive financial and human investment in the human genome project has the epistemological drawback of removing scientists "right to be wrong"[28]. But, in the words of John F Kennedy, we have been here before. Drug dosage, sphere of action and individualisation have all been debated[29].

The need for individualisation, especially in chronic disease, undermines the status of Evidence Based Medicine (E.B.M), the current gold standard in clinical medicine. The B.M.J. recently noted caveats in diagnosing rare clinical cases from general knowledge about large populations[30]. The journal noted, "[...] what is needed is to focus on the individual combination of symptoms and signs, and to then work out what such a combination suggests".

A further problem facing medicine is in the return of old diseases such as tuberculosis. This disease currently infects one third of the world's population and kills approximately two million individuals annually[31]. Once a vanquished foe

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[26] Fuller (2000) (b) pp 145-151

[27] It would be interesting to discover if there is any evidence that homoeopathic remedies alter genetic structure. In view of Hahnemann's theory of the inherited miasms, and the ability of the homoeopathic similimum to reverse this process, this should be the case.

[28] Fuller (2000) (b) pp 145-151

[29] Homoeopathy literature also details drug interaction- inhibition, augmentation and anti-doting.

[30] British Medical Journal (1999);319;1279 13th November p 1

[31] J.A.M.A.Vol 293 No 22 June 8th (2005) p 1

tuberculosis has returned in an M.D.R. form, particularly in China, Bangladesh, India, Indonesia, Nigeria, Russia and parts of the US, most notably California. These first five countries account for 80 % of all new tuberculosis cases 90-95% of which sees the disease remain latent. The Beijing strain is prevalent in parts of Russia, especially among the prison population, and is twice as drug resistant as other strains.

Homoeopathic principles predict the Beijing's strain's doubled M.D.R. status suggests the existence of a marked variation within the symptomotology of the disease itself. Indeed, an analysis of known cases shows the Beijing strain of tuberculosis does not produce the characteristic tubercular symptom of *night sweats*. In homoeopathic, but not in allopathic terms, this makes the Beijing strain a different disease, requiring a different similimum or drug. Indeed, Hahnemann believed infectious diseases mutated with each epidemic:

"[...] each epidemic of such migrant fevers manifests each time as a new disease that has never before existed in exactly that form : it differs greatly in its course, in many of its most prominent symptoms, in its whole behaviour. Each appearance is so dissimilar to all previous epidemics whatever we call them, that one would have to forswear all logic and precision of thought to give such widely varying epidemics the name established by accepted pathology and to treat them all identically in accordance with this same faulty label"[32].

If researchers wish to find a drug to which the Beijing strain is *not* resistant then the lesson of homoeopathy is that they should look at one which is *not* capable of *producing* night sweats in its proving. I would suggest *isoniazid, rifampin, pyrazinamide and ethambutol*, the initial regimen suggested for tuberculosis, all have within their pathogeneses the ability to *cause* night sweats[33]. Reported overdosing, poisonings and side effects in those particularly sensitive to these drugs may reveal this. Further, these drugs were developed over forty years ago and their inability to cure in this instance indicates a "new" disease has developed.

[32] Hahnemann (1810) p 81
[33] JAMA 293 No 22 June 8th (2005) p 1

That said, serious obstacles remain preventing homoeopathy from achieving research status in the scientific community. A recent leader article in the Lancet indicated one such obstacle[34]. Typically, the article claimed at the outset, that "[...] specific effects of homoeopathic remedies seem implausible" and then set out perform a meta analysis on 110 homoeopathic and 110 allopathic double blind, randomised placebo controlled trials from 19 electronic data bases, research papers and "contacts with experts". Trials were matched for disorder and type of outcome and predictably showed "weak evidence" for a specific effect of homoeopathy, but "strong evidence" for a specific effect for conventional interventions. The authors conclude, "This finding is compatible with the notion that the clinical effects of homoeopathy are placebo effects".[35] Caution is required regarding E.B.M. and the utility of the R.C.T. as noted in this thesis since they both have epistemological limitations[36]. One is left wondering why the trial did not indicate to the investigators the *greater* placebo effect of allopathic drugs (does a placebo effect have to be small?).

There is much confusion around this issue because, in my view, there are two separate but related issues being conflated here. One issue is whether the homoeopathic dilute remedy has *any effect at all*, another is whether that effect is *curative in disease*. The first is far easier to establish than the second and yet it is always the second that is tested in R.C.T.s This, in turn, is related to two further, wrongly conflated issues, homoeopathic remedies have no *effect because of their dilute nature* and homoeopathy's principle of similia is not *curative*. Thus a four- way matrix gives us sixteen possible outcomes:

Material Drug has Effect	Drug is Curative (no principle)
Dilutions have Effect	Drug curative according to Similia

Figure 7 The Two Variables Testable in Homoeopathic Drug Trials

[34] The Lancet Volume 366 No. 9487 27th August 2005 pp 726-732. This was an argument regularly employed by allopaths against homoeopaths in the 19th century.
[35] The Lancet Vol 266 No. 9487 August (2005) p 727
[36] Homoeopathy does have some specifics e.g. belladonna for scarlet fever.

Material drug effect	Dilute drug effect	Material drug curative	Dilute drug curative
Material drug no effect	Dilute drug no effect	Material drug non curative	Dilute drug non curative
Similia operates with material drugs	Similia operates with dilute drugs	Similia curative with material drugs	Similia curative with dilute drugs
Similia does not operate with material drugs	Similia does not operate with dilute drugs	Similia not curative with material drugs	Similia not curative with dilute drugs

Figure 8 The sixteen possible combinations of the four variables shown in figure 7

Thus the Lancet article mentioned above aims to determine the "specific effects" and the "treatment effects of homoeopathic remedies". Any investigation would be much improved by analysing just one of these variables e.g. homoeopathic remedies in their dilutions have an *effect*, which often is measurable physiologically, e.g. increased or decreased pulse, pupil dilation, protein in the urine etc. This amounts to a homoeopathic proving, albeit with the emphasis upon objective signs rather then subjective symptoms. The second, I would suggest, is clinical evidence (either in the form of a trial or from evidence at the bed-side) and is more difficult to establish being subject to more individual variation. If homoeopaths or other clinical researchers could convincingly overcome the first objection, they would reduce the burden of proof for themselves in the second.

To the notion of a Hegelian synthesis suggested throughout this thesis I am suggesting also a resolution in medicine based upon the Jungian concept of "individuation". Individuation relates to the resolution of conflict between the conscious and unconscious minds, narrowing the psychic distance between them. Likewise, a superior medical science depends upon the integration of historical successes disowned by the current medical elite. Left too long, this polarisation over generations

and the repression associated with it may develop to such an extent that the two sides are unable to find each other[37]. The persistence of dualisms in the literature reflect a lack of integration in the field of the history of medicine. Moreover, for this process to be complete allopathy must take back its projections, particularly its accusations of homoeopathy's placebo status, its lack of therapeutic certainty, and apparent inability to cure disease. In so doing it may gain the necessary strength to acknowledge its own failings.

Just as the repressed side of the human personality, those traits considered undesirable and unsuitable components of the persona Jung called the "shadow", represent a source of great energy, creativity and change for the individual, homoeopathy holds the key, I argue, for creativity in medicine. It constitutes what William Miller called the "golden shadow"[38]. As the macrocosm of the socio/historical corresponds to the microcosm of the inner world of the individual, a la Hegel and Jung, the *telos* to which both move is the integration of their own shadows, on the levels of history and psychology respectively. There is a sense in which the intellectual achievements of Jung and Hegel represent complementary aspects of a common human project. Whereas Hegel traced the progression of consciousness, as exemplified in the outworking of the rational spirit through the human will as it unfolded through human history as various manifestations of the State, so Jung traced the parallel human project of acknowledging understanding the human unconscious in the form of mythology, legend, alchemy and archetypal dream images[39]. What Hegel did for consciousness, Jung did for unconsciousness. Together they represent the process of complete human collective integration, the common human project of which the integration of homoeopathy into medical science is part.

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[37] Robert Bly notes (1988) that Christian Ethics have contributed consistently to this state of affairs by over the centuries repressing the 'dark' side of the human personality and thereby polarising the human psyche. Jung saw this as a significant contributory factor to the many atrocities associated with 20th century history. See p 363.

[38] William A Miller (1989).

[39] Jung saw philosophical alchemy as the "[...] historical counterpart of my psychology of the unconscious" which provided an "[...] uninterrupted intellectual chain back to Gnosticism [...]". This led Jung to conclude that "[...] without history there can be no psychology, and certainly no psychology of the unconscious [...]". Jung (1995) pp 231-232. Hence, Hegel traced the telos of the will, of consciousness, whilst Jung traced that of the unconscious through Gnosticism and Alchemy, culminating, at least in part, in his own work.

This thesis is a small first step toward such integration, to reveal scientific medicine's rejected history and to push the boundaries of rationality still further forward. Its ultimate goal is to contribute in some small way to creating a more effective scientific medicine by unleashing the power inherent in homoeopathy's history, as medicine's repressed, unwelcome and unwanted Golden Shadow.

Bibliography.

Abrams, P – Historical Sociology. Open Books (1982)

Allen, Timothy Field, (A.M., M.D) Encyclopaedia of Pure Materia Medica , New York 10 volumes (1874-1879)

.

Allen, Timothy Field, (A.M. M.D)'The Effects of the Abuse of Tobacco' American .Institute of Homoeopathy Transactions (1884) 37th session pp 189-216

American Institute of Homoeopathy 'Use of Tobacco' Transactions of the American Institute of Homoeopathy (1875), 27th session.

Arnold, David and Sarkat, Sumit 'In Search of Rational Remedies' in, Plural Medicine , Tradition and Modernity 1800-2000 Ed. Ernst Waltraud Studies in the Social History of Medicine Routledge London and New York (2002)

Arnulphy, B.S.(M.D.) '.The Value of Tuberculin in Lobular Pneumonia' in Transactions of the American Institute of Homoeopathy (1896) pp 608-629.

Bailey, Benjamin F. (M.D). 'Presidential Address' The Transactions of the American Institute of Homoeopathy (1889) pp 19-36

Bailey, Benjamin F (M.D) 'Presidential Address' in TheTransactions of the American Institute of Homoeopathy (1899) pp 37-54

Bailey, Benjamin F (M.D) (Lincoln Nebraska) 'Homoeopathy and the Corporations ' in The Transactions of the American Institute of Homoeopathy (1905) pp 91- 105

Bailey, E.H.Stillman (Ph.D) 'The Proof of the Law of Similia from the Electro – Chemical Physiological Standpoint' in The Transactions of the American Institute of Homoeopathy (1900)

Bandelier Report on the Combined Sanitorium and Tuberculin Treatment of Pulmonary Tuberculosis J.A.M.A. March 12th (1910)

Bellows, Howard P. (M.D) 'On Re-proving the Homoeopathic Materia Medica' in The Monthly Homoeopathic Review Vol XLIV September 1st (1900) pp 523- 535

Bellows, Howard P. (M.D) 'The Year's Progress in the Test Drug-Proving of the American Homoeopathic Ophthalmological, Otological and Laryngological Society, With Some Results Obtained.',in The Transactions of the American Institute of Homoeopathy (1904) pp 97-103.

Bellows Howard, P. (M.D) 'The Future of Drug-Proving in the Light of the Test-Proving of the O.,O. and L. Society' in the Report of the Bureau of Materia Medica in The Transactions of the American Institute of Homoeopathy (1903) pp 135-193

Bellows, Howard P. (M.D) Test Drug Proving of the Otological ,Ophthalmological and Laryngological Society: A Reproving of Belladonna (Boston 1906)

Berger, Peter and Luckmann Thomas , The Social Construction of Reality:A Treatise in the Sociology of Knowledge Penguin Books (1991)

Berkart, I.B. (M.D,.M.R.C.P.L) 'Rest in the Treatment of Consumption of the Lungs' in The Lancet Oct 18th((1873) pp 553-554.

Berliner, Howard S. A System of Scientific Medicine: Philanthropic Foundations in the Flexner Era. Tavistock Publications New York and London (1985)

Birdsall, Stephen T. (M.D.) 'The Roentgen Ray in the Treatment of Skin Diseases' in The Transactions of the American Institute of Homoeopathy (1907) pp 906-917.

Black, J. R. (M.D.) 'Relation of Heredity to Race Degeneration and Improvement' in The Transactions of the American Medical Association (1977) Vol XXVIII pp 462-480.

Blackley, G Galley (M.B.Lond) 'On The Physiological Action of Certain Alkaloids Derived From Opium' in Annals and Transactions of the British Homoeopathic Society and the London Homoeopathic Hospital (1876) Vol VII pp 42-53

Blake, Edward (M.D.) 'A Proving of Vespa Vulgaris by Clinical Gleanings' in The Monthly Homoeopathic Review Vol XIX (1875) pp 418-429

Bloor, David 'Polyhedra and the Abominations of Leviticus' in the British Journal for the History of Science Vol II No 39 (1978) pp 245-272

Bly, Robert A Little Book of the Human Shadow edited by William Booth, Harper, San Francisco (1988)

Boericke Willaim (M.D). 'In Search of the Similimum Shall We Endorse Section 18 of the Organon, Which Says That the Totality of the Symptoms Must be the Sole Indication to Direct Us in the Choice of a Remedy' in The Transactions of the American Institute of Homoeopathy (1896) pp 274-306.

Boericke, William (M.D.) Materia Medica with Repertory; Side of the Body and Drug Affinities; Relationship of Remedies, Ninth Edition I.B.P.S. San Francisco (1927).

Boericke, William (M.D.)'Introductory Remarks by the Chairman' in Transactions of the American Institute of Homoeopathy (1907) pp 161-163.

Boston O. O. L. Society Study of the Pathogenetic Action of that Drug upon the Healthy Human Organism. (1906)

Bourdieu, Pierre; Loic J. D.; Wacquant, Samar Farage 'Rethinking the State: Genesis and Structure of the Bureaucratic Field' in Sociological Theory Vol 12, No 1 (March 1994) pp 1-18

Bradford, Thomas Lindsley, Logic of Figures Philadelphia, Boericke and Tafel, (1900)

Bradley, J. Dupree, M and Durie, A 'Taking the Water Cure: The Hydropathic Movement in Scotland 1840-1940' in Business and Economic History, Vol 26 No 2 Winter (1997).

Bradley, J and Dupree, M. 'A Shadow of Orthodoxy? An Epistemology of British Hydropathy 1840-1858' Medical History (2003) April 47 (2) pp 173-194.

Breyfogle, William L. (M.D.)'The Proofs of Drug Presence and Power in Attenuation Above the Sixth Decimal as Furnished by the Tests of Chemistry ' in Transactions of the AIH (1880) 38th session pp 170-175

Brierley-Jones L.K. 'Recovering Homoeopathic Science at the Turn of the 20th century: An Exercise in Tory Historiography.' in Wellcome History, February 2004.

British Homoeopathic Journal (2000) Vol 89 No 1 Nature Publishing Group for the Faculty of Homoeopathy.

British Homoeopathic Journal (2000)Vol 89 No 2 Nature Publishing Group for the Faculty of Homoeopathy.

British Homoeopathic Society 'Two International Medical Congresses' in the British Journal of Homoeopathy Vol XXXIX CLVIII October (1881) pp 289-307

Brown D Dyce and Pope, Alfred C, (eds) 'Drug Provings' in Monthly Homoeopathic Review April 1st (1879) pp 193-202.

Brown, D.Dyce M.D. 'On Aloes' in the Monthly Homoeopathic Review December 1st (1899) pp 653-684

Brown, E. Richard Rockefeller Medical Men University of California Press (1979).

Brush, Stephen G. 'Scientists as Historians' Osiris 2nd series Vol 10 Constructing Knowledge in the History of Science (1995) pp 214-231

Buchmann, O. (M.D.) 'Microscopic Observations and Examinations of Homoeopathic Triturations of Metals' in The North American Journal of Homoeopathy (1880) Article XLIII Translated by G.E. Gramm M.D. Philadelphia pp 525-583.

Buist, John Brown Vaccinia and Variola: A Study of Their Life History, J and A Churchill, London, (1887).

Bunge, John Textbook of Physiological and Pathological Chemistry, Blakiston (1902).

Burnett, James Compton, (M.D.) Gold As A Remedy in Disease, Homoeopathic Publishing Company, February (1879).

Burnett, James Compton, (M.D.) The New Cure of Consumption By Its Own Virus Homoeopathic Publishing Company (1890)

Bynum W. F. and Porter, Roy Companion Encylopedia of the History of Medicine Vols I and II Routledge, London and New York (1993)

Bynum, W. F. Science and the Practice of Medicine in the Nineteenth Century Cambridge University Press (1994)

Carmichael, T.H. (M.D.) The Alcohol Question in the Journal of the American Institute of Homoeopathy Vol XIII July1920-June (1921) pp 874-876.

Cartier, Francois (M.D.) ,Therapeutics of the Respiratory Organs Philadelphia, Boericke and Tafel (1919). Reprint B Jain Publishers Limited (1989)

Chand, Diwan Harish 'History of Medicine and the Contribution of Hahnemann' in Bulletin of the Indian Institutue of Medicine Vol XIX No 1 January 1990 pp 7-34

Clay, John (M.D.) 'Chian Turpentine in Cancer of the Uterus' in The Lancet December 11th (1880) pp954-965.

Collins, Randall , Conflict Sociology: Toward An Explanatory Science. New York Academic Press (1975).

Cook, N. F. (M.D.) ' Annual Address' in Transactions of the American Institute of Homoeopathy (1868) pp 94-5

Cooke, A. M. A History of the Royal College of Physicians of London. Oxford Clarendon Press for the Royal College of Physicians (1964-1972) (George Norman Clarke)

Cooper, G. F (M.D.). 'Veratrum Veride, Green or American Hellebore; Its Physiological and Therapeutic Effects Considered' in Transactions of the American Medical Association (1879) Vol 30 pp 206-216.

Coulter, Catherine R. Portraits of Homoeopathic Medicines: Psychophysical Analyses of Selected Constitutional Types Volume I North Atlantic Books (1986)

Coulter, Catherine R. Portraits of Homoeopathic Medicines: Psychophysical Analyses of Selected Constitutional Types Volume II Quality Medical Publishing Inc. St Louis Missouri (1998)

Coulter, Catherine R. Portraits of Homoeopathic Medicines: Expanding Views of the Materia Medica Volume III Ninth House Publishing Bethesda, Maryland (2002)

Coulter, Harris L. Divided Legacy: The Conflict between Homoeopathy and the American Medical Association. North Atlantic Books first available in 1969 as unpublished PhD thesis . First edition (1973) Second edition (1982).

Cowen, David, 'Materia Medica' in Numbers R.L. (ed) The Education of American Physicians. University of California Press (1980)

Cowl, Walter G. (M.D.) 'A Comparison of Old and New School Treatment in the Hospitals of New York' in The Transactions of the American Institute of Homoeopathy (1879) pp 365-372.

Cowl, W. Y.(M.D) 'The Use of the Frog for the Purposes of Homoeopathy' in the Report of the Bureau of Anatomy , Physiology and Pathology of the Transactions of the American Institute of Homoeopathy 41st Session (1888) pp 631-647.

Dake, J. P. (M.D.) 'A College of Drug Provers for the Cultivation of the Materia Medica' in the Transactions of the American Institute of Homoeopathy (1875) pp 734-741.

Dake, J. P. (M.D.)' Introductory Report to the Bureau of Materia Medica, Pharmacy and Provings' in The Transactions of the American Institute of Homoeopathy (1880) pp 163-165.

Dake J P (M.D.) 'The Regeneration of the Materia Medica' in The British Journal of Homoeopathy (BJH) (1880) Vol XXXVIII pp 12-21

Davenport Geoffrey The Royal College of Physicians and its Collections London James and James (2001)

Davidovitch, Nadav 'Negotiating Dissent: Homoeopathy and Anti-Vaccinationism at the Turn of the Twentieth Century' in The Politics of Healing Robert Johnston (ed) Routledge (2004).(a)

Davidovitch, Nadav 'From a "Humble Humbug" to the "Powerful Placebo": The Image of the Placebo in the Orthodox-Alternative Medicine Debate' in Twentieth Century Ethics of Human Subject Research : Historical Perspectives on Values, Practices and Regulations ,Volker Roelke and Giovanni Maio (eds), Verlag (2004) (b) pp 293-307.

Davis, Nathan Smith (M.D.) 'Address on Practical Medicine' in The Transactions of the American Medical Association (1873) pp 114-115

Davis, Nathan Smith (M. D.) 'Annual Address' in Transactions of the American Medical Association (1874) pp113-127.

Davis, Nathan Smith (M.D.) 'Address on Practical Medicine' in the Transactions of the American Medical Association (1874) pp101-103.

Deane, Lieutenant Colonel H. E. (M.D.) 'Studies of the Pulse in Health' in The Transactions of the British Homoeopathic Society (1911) pp 148-169.

Dearborn, Earl H 'The Development of Pharmacology at the Boston University School of Medicine' The Boston Medical Quarterly, 6 No 2 (June 1955) 34

Deschere, Martin (M.D). 'The Elective Affinity of Drugs' in The Transactions of the American Institute of Homoeopathy (1897) pp 199-208.

Didama, Henry D (M.D.) (President) 'First Annual Address to the Hew York State Medical Association, Delivered in New York, November 18th (1884) in Journal of the American Medical Association December 6th, Vol. III No. 23, pp 617-622.

Dinges, Martin Historical Aspects of Unconventional Medicine: Approaches Concepts and Case Studies (2001) European Association for the History of Medicine and Health Publications, Sheffield

Dinges, Martin Patients in the History of Homoepathy (2002) European Association for the History of Medicine and Heath Publications Sheffield.

Douglas, Mary, Natural Symbols (1970) Barrie and Rocklikk, London (reprinted 1996 by Routledge and Kegan Paul)

Douglas, Mary (ed) Essays in the Sociology of Perception Routledge and Kegan Paul, London, Boston and Henley (1980).

Drury, Alfred (M.D). 'Homoeopathy and Ehrlich's Hypothesis' in The Transactions of the American Institute of Homoeopathy (1903) pp 97-103.

Drysdale, J. J. (M.D), Dudgeon, R.E. Hughes (M.D.), Richard Hughes (L.R.C.P.) 'A Call Upon All Homoeopathic Physicians for the Proving of Medicines on Healthy Humans and Animals' in the British Homoeopathic Journal Vol XXXII (1874) p 255

Dudgeon, Robert Ellis (M.D). The Lesser Writings of Samuel Hahnemann collected and translated by Dudgeon. Radde. New York. (1852).

Dudgeon, Robert Ellis (M.D) and Hughes, Richard (M.D) 'Triturations' in The British Journal of Homoeopathy (1880) Vol XXXVIII pp 324-340.

Dudgeon, Robert Ellis (M.D) 'Notes on a New Sphygmograph' in Homoeopathic World September 1st (1880) pp 388-391.

Dudgeon, Robert Ellis (M.D.) The Sphygmograph (1882) Balliere, Tindall and Cox.

Dudgeon, Robert Ellis (M.D), Hughes, Richard (L.R.C.P.) 'Homoeopathic Convention of 1881' in the British Journal of Homoeopathy Volume XL (1882) pp35-45.

Dudgeon, Robert Ellis (M.D.) 'On Stammering Heart' in The Journal of the British Homoeopathic Society Vol 1 (1893) pp 3-23.

Dudgeon, Robert Ellis (M.D). 'The New Materia Medica of the German Homoeopathic Society' in the Monthly Homoeopathic Review Vol XLIII January 2nd (1899) pp 5-9

Eaton, Charles W. (M.D.) 'The "New Vaccination in the Courts of Iowa" in the Homoeopathic World November 2nd (1908) pp 491-501.

Ferguson, Niall, Virtual History : Alternatives and Counterfactuals Pan Macmillan (2003), London.

Fisher, P (M.D.) 'How Does Homeopathy Work? Are We Looking in the Right Place? Homeopathy (formerly the British Homoeopathic Journal) Elsevier Science Ltd. (2003) 92 pp 1-2

Flehinger , Brett The 1912 Election and the Power of Progressivism : A Brief History With Documents Boston, Bedford St Martin's (2003)

Forbes 'Homoeopathy, Allopathy and Young Physic' (p 39) New York, William Radde (1846) or British and Foreign Medical Review pp 225-265. Held at the James Lind Library.

Foster R.N. (M.D). 'The Logical Basis of the Law of Similars : Does It Commend Itself To Our Reason' in The Transactions of the American Institute of Homoeopathy (1896) pp 145-156.

Foucault, Michel, The Birth of the Clinic, Presses Universitaires de France (1963), Routledge (1989).

Foucault, Michel , Discipline and Punish: The Birth of the Prison New York , Pantheon (1977)

Foucault, Michel , Power/Knowledge- Selected Interviews and Other Writings 1972-1977 ed Colin Gordon U.S.A. Pantheon 1980 U.K.; Harverster 1981.

Freund, P and McGuire B Health Illness and the Social Body. (1999) Prentice Hall Inc.

Frolich, Ernst Hilarius (M.D.) and Hausmann, Franz (M. D.) 'A Call Upon All Homoeopathic Physicians for the Proving of Medicines Upon Healthy Men and Animals' in the British Journal of Homoeopathy Vol XXXII (1874) pp 255-258.

Fuller, Steve. Philosophy, Rhetoric and the End of Knowledge :The Coming of Science and Technology Studies Madison WI University of Wisconsin Press. (1993)

Fuller, Steve Science Open University Press (1997)

Fuller, Steve.(a) Thomas Kuhn: A Philosophical History For Our Times (2000) University of Chicago Press.

Fuller, Steve (b)The Governance of Science (2000) Issues in Society Series ed Tim May Open University Press Buckingham Philadelphia

Fuller, Steve 'The Pride of Losers: A Genealogy of the Philosophy of Science' History and Theory 41 October 2002 pp 392-409

Garrison , Fielding H. ((A.B. M.D.) History of Medicine WB Saunders Company 1929 Philadelphia and London.

Gaskell, George and Hampton, James 'A Note on Styles in Accounting' in Essays in the Sociology of Perception by Mary Douglas (ed) Routledge and Kegan Paul, London, Boston and Henley (1982) pp 103-111.

Gatchell, Chas H. (M.D) 'On the Mode of Action of Drugs in the Crude Form and in Dilute Solution, with an Attempted Interpretation of Hahnemann's Theory of Dynamization' in The Transactions of the American Institute of Homoeopathy (1903) pp 82-96.

Geison, G L 'Scientific Change, Emerging Specialities and Research Schools' History of Science (1981) 10 20-40, 23

Giddens, Anthony, New Rules of Sociological Method: A Positive Critique of Interpretative Sociology New York, Basic Books (1976) (1993 2nd edition).

Gijswijt-Hofstra, Marijke 'Conversions to Homoeopathy in the 19th Century –The Rationality of Medical Deviance' in Illness and Healing Alternatives in Western Europe (1997) ed by Marijke Gijswijt-Hofstra, Hilary Marland and Hans de Waardt Routledge London and New York pp161-182.

Gjertsen, D Science and Philosophy : Past and Present Harmondsworth Penguin (1989).

Goodbody, Professor (M.D.) 'A Modern Proving' in the Monthly Homoeopathic Review Vol XLV January 1st (1901) pp 40-43

Granshaw, Lindsay ' Upon This Principle I have Based a Practice: The Development and Reception of Anti Sepsis in Britain, 1867-90'in Medical Innovations in Historical Perspective (ed) John V Pickstone New York (1992)

Grant, A. B.(M.D).'The Pathologcal Value of the Microscope' in The Transactions of the American Institute of Homoeopathy (1896) pp 646-650

Gray E W (M.D.) The Relation of Physiology to Medicine The Transactions of the American Medical Association Vol 25 1874 pp 153-165

Gray T.J.(M.D.) 'The Metaphysical, the Permanent Element in Science.' The Transactions of the American Institute of Homoeopathy,,1896 pp 359-368.

Gross, S. D. (M.D.) 'A Discourse in Bloodletting Considered As A Therapeutic Agent' in The Transactions of the American Medical Association (1875) pp 419-432.

Gross, S. R. (M.D. OXON.) 'Address on Practical Medicine' in The Transactions of the American Medical Association (1874) pp 423-437.

Gross, S R (M.D. OXON) 'A Discourse on Bloodletting Considered as a Therapeutic Agent' in The Transactions of the American Medical Association (1875) pp 419-421

Hacking, Ian 'Wittgenstein Rules' in Social Studies of Science Vol 14, No 3, (August 1984) pp 469-476.

Hahnemann, Samuel C.F. (M.D.)The Organon of Medicine (1848) 3rd American Edition

Hahnemann, Samuel C. F. (M.D.) The Organon of Medicine 6th edition Gollancz (1982).Original 1st edition published in (1810) in Kothen, Germany.

Hahnemann, Samuel C.F.(M.D.) The Chronic Diseases: Their Peculiar Nature and Their Homoeopathic Cure B Jain Publishers (1828) (reprint 2001) New Dehli, India.

Hallman, Victor H. (M.D.) 'Introductory Remarks' in The Transactions of the American Institute of Homoeopathy (1907) pp 232-238.

Hanchett, W.H. (M.D). 'Meddlesome Medicine' in The Transactions of the American Institute of Homoeopathy (1901) pp 154-160

Handley, Rima A Homoeopathic Love Story : The Story of Samuel and Melanie Hahnemann North Atlantic Books (1990)

Hanson , Russell 'The Logic of Discovery' in The Journal of Philosophy, Vol 55 No 25 Dec 4 (1958) pp 1073-1089.

Hayward, Charles W. (M.D.) '"Ions" The Secrets of the Past, the Hopes of the Future' in the The Transactions of the British Homoeopathic Society (1911) pp 37-49

Hedges, Larry 'How Hard is Hard Science, How Soft is Soft Science? The Empirical Cumulativeness of Research' in American Psychologist (1987) Vol 42 No 42 443-455.

Hegel, George W. F. The Philosophy of History, (first delivered as a series of lectures in 1822), translated by J. Sibree Prometheus Books (1991)

Hering, Constantine M.D. 'Glonoine' in The British Journal of Homoeopathy (1849) Vol VII pp 412-421.

Hodge, Jonathan and Radick, Gregory (eds) The Cambridge Companion to Darwin Cambridge University Press (2003)

Hofstadter , Richard The Age of Reform: From Bryan to F.D.R. (1962) Jonathan Cape Thirty Bedford Square , London.

Hollister J H (M.D.) ,Address of the Chairman of the Section on Practice of Medicine , Materia Medica and Physiology' in The Journal of the American Medical Association July 28th (1883) No 3 pp 66-68

Holmes, Oliver Wendell (M.D.) Homoeopathy and it's Kindred Delusions, Boston (1842)

Holmes, Oliver Wendell (M.D.) Currents and Counter Currents in Medical Science and Other Addresses and Essays, (1860) Boston, Ticknor and Fields .

Holthouse, Carsten (F.R.C.S.E.) 'Suggestions for a More Scientific Method of Treating Reducible Hernia' in The Lancet March 15th (1873) p 371

Hooker, Edward Beecher (M.D.) 'The Presidents Address' in The Transactions of the American Institute of Homoeopathy (1907) pp 55-72.

Howe, Richard Herbert 'Max Weber's Elective Affinities: Sociology within the Bounds of Pure Reason' American Journal of Sociology Volume 84 Number 2 (1978) pp 366-385

Hughes, Richard (L.R.C.P. Ed) Principles and Practice of Homoeopathy Parts I and II (No Year c.1878?). Reprint (1990) B. Jain Publishers Ltd. New Dehli.

Hughes, Richard (L.R.C.P) 'The Scientific Claims of Homoeopathy' in The British Journal of Homoeopathy Vol XL No CLX April (1882) by Richard Hughes pp 106-113

Hughes, Richard (L.R.C.P. Ed) Lectures on the Sources of the Homoeopathic Materia Medica Pura Turner and Co Fleet Street. (No Year)

Hughes, Richard (L.R.C.P.) and Dudgeon R. E, 'Triturations' in The British Journal of Homoeopathy (1880) Vol XXXVIII pp 324-340.

Illich, Ivan, Limits to Medicine: Medical Nemesis: The Expropriation of Health (2001) Marion Bayers Pubs. New Ed.

Jenner, William Sir, (K.C.B.) 'The Anatomical Relations of Pulmonary Phthisis' in The British Medical Journal March 22nd 1873 pp 325-329.

Juette, Robert, Risse, Guenter B, Woodward, John: Culture, Knowledge and Healing: Historical Perspectives of Homoeopathic Medicine in Europe and America . European Association for the History of Medicine and Health.' (1998).

Juette, Robert (1998) The Paradox of Professionalisation pp 65-88 in Culture, Knowledge and Healing: Historical Perspectives of Homoeopathic Medicine in Europe and America. European Association for the History of Medicine and Health.'

Jung C. G. Memories, Dreams and Reflections Fontana Press, London (1995)

Kaptchuk, Tel J. 'Intentional Ignorance: A History of Blind Assessment and Placebo Controls in Medicine' Bulletin of the History of Medicine 72 (1998) pp. 389-433

Kaufman, Martin. 'Homeopathy in America: The Rise and Fall of a Medical Heresy.' The Johns Hopkins Press, Baltimore and London. (1971)

Kaufman, Martin 'Homeopathy in America:The Rise and Fall and Persistence of a Medical Heresy' in Norman Gevitz (ed) Other Healers: Unorthodox Medicine in America (Baltimore 1988) , pp 99-123 , quote 123.

Keller, Morton Regulating a New Society: Public Policy and Social Change in America 1900-1933 Cambridge, Mass, Harvard University Press (1994).

Kellogg, E. M. (M.D.) 'Comparative Mortality in the Cities of New York, Boston and Philadelphia: Under Homoeopathic and Allopathic Treatment.' in The Transactions of the American Institute of Homoeopathy (1873) pp 454-456.

Kelly, George A. ' " Les Gens De Lettres"' An Interpretation ' in Essays in the Sociology of Perception Mary Douglas (ed) Routledge and Kegan Paul, London, Boston and Henley (1982) pp 120-131

Kent J. T. (M.D.) Lectures on Homoeopathic Philosophy (1900) Reprint 1954 B Jain Publishers New Dehli.

Kent, J.T. (M.D) 'Remedies Related to Pathological Tissue Changes' in The American Homoeopathic Magazine available from the Islington Centre for Homoeopathy London N7 8PC (c.1906)

Kett, J. The Formation of the American Medical Profession Yale University Press (1968).

King, William Harvey (ed) A History of Homoeopathy and its Institutions in America (4 vols) Lewis Publishing Company, New York and Chicago (1905)

Kirschmann, Anne Taylor 'Adding Women to the Ranks, 1860-1890: A New View with a Homeopathic Lens ' in Bulletin of the History of Medicine (1999) 73pp 429-446.

Kirschmann, Anne Taylor A Vital Force: Women in Homoeopathy Rutgers University Press New Brunswick, New Jersey and London (2004)

Kleinberg, B Urban America in Transformation. Sage (1995).

Koch, R The Aetiology of Anthrax Based on the Developmental Cycle of Bacillus Anthracis. Beitr. Biol. Pflanz, (1876)

Kwong, Peter and Miscevic, Dusanka Chinese America: The Untold Story of America's Oldest New Community The New Press, New York (2005).

Lakatos, Imre Proofs and Refutations: The Logic of Mathematical Discovery Cambridge University Press (1976)

Lawton, C. H.(M.D) 'Proofs of Medicinal Power in Attenuations Above the Sixth Decimal' in The Transactions of the American Institute of Homoeopathy (1880) pp 214-216.

Le Fanu, James The Rise and Fall of Modern Medicine London. Little, Brown. (1999).

Leffmann, Henry (M.D) 'Sensationalism and Dogmatism in Sanitary Matters', Journal of the American Medical Association February (1885) pp 203-4

Linn, A M (M.D). 'Recent Scientific Confirmation of the Law of Similars', in The Transactions of the American Institute of Homoeopathy (1907) pp 312-317.

Logan, Thomas M. (M.D.) 'President's Address' in The Transactions of the American Medical Association (1873) pp 81-84.

Logan, Thomas M. (M.D.) (ed)'The Relation of Physiology to the Practice of Medicine' in The Transactions of the American Medical Association (1874) pp153-166

Ludmerer, Kenneth M Learning To Heal :The Development of American Medical Education. Basic Books Inc. USA (1985).

Maehle, Andreas-Holger ' "Receptive Substances": John Newport Langley (1852-1925) and his Path to a Receptor Theory of Drug Action in Medical History, (2004), Vol 48, pp153-174.

Mannheim, Karl Ideology and Utopia Routledge and Kegan Paul, New York (1936)

McConkey, Thomas G. (M.D) 'How and When is Tuberculosis Contracted' North American Journal of Homoeopathy (NAJH) Sept (1910) Vol LVIII No 9 pp 559-566

McGeorge, W. (M.D.) 'Provings of Hamamelis Virginica' in The Transactions of the American Institute of Homoeopathy (1875) pp pp308-317.

McGerr, Michael A Fierce Discontent : The Rise and Fall of the Progressive Movement in America 1870-1920 Free Press (2003)

McKeown, T The Modern Rise of Population Edward Arnold, London, (1976)

Mohr, Charles (M.D.)'Tabacum' in the The Transactions of the American Institute of Homoeopathy (1906) pp 323-333

Miller, William A. Your Golden Shadow: Discovering and Fulfilling Your Undeveloped Self Harper and Row, San Francisco (1989)

Mitchell, Timothy 'The Limits of the State: Beyond Statist Approaches and Their Critics', in American Political Science Review Volume 85 No 1 March (1991).pp 77-96

Nash E. B. (M. D.) Leaders in Homoeopathic Therapeutics First published 1898 . Reprint B Jain Publishers(1989) (New Dehli).

Nicholls, Phillip. Homoeopathy and the Medical Profession Croom Helm USA (1988).

Ockford, George (M.D.) 'Diverse Drug Action' in The Transactions of the American Institute of Homoeopathy (1879) pp 174-180.

O'Donnell, Michael, Medicine's Strangest Cases Robson Books London (2002)

Osler, William The Principle and Practice of Medicine: Designed for the Use of Practitioners and Students of Medicine D Appleton and Co, New York (1892).

Ott, Katherine Fevered Lives: Tuberculosis in American Culture Since 1870 Harvard, London England (1996)

Owen, Dennis E. 'The Witchcraft Cosmology of Salem Village in 1692' in Mary Douglas Essays in the Sociology of Perception, Routledge and Kegan Paul, London, Boston and Henley (1982) pp 275-301

Owens, William (M.D.)'Pathology in Relation to Homoeopathic Therapeutics' in The Transactions of the American Institute of Homoeopathy (1892) 45th session pp 534-544

Peck, Scott The Road Less Travelled Rider London Sydney, Auckland Johannesburg (1978)

Perez and Tomsko 'Homoeopathy and the Treatment of Mental Illness in the Nineteenth Century' in Hospital and Community Psychiatry Oct (1994) Vol 45 No 10

Perucci, Robert and Gerstl, Joel eds The Engineers and the Social System New York, John Wiley and Sons (1969)

Persons, Stow 'The Decline of Homoeopathy- The University of Iowa 1876-1919' Bulletin of the History of Medicine (1991) Vol 65 pp 74-87

Philip, R W (M.D.)'The Tuberculous Gland: Its Significance and Treatment' The Lancet July 2nd (1910) Vol II pp 19-21

Pope, Alfred C. (M.D.), Brown, Dyce D (M.D.) 'Allopathic Provings' in The Monthly Homoeopathic Review Vol XX April 1st (1876) pp 197-119.

Pope, Alfred C. (M.D.), Brown, Dyce D. (M.D.) 'Provings of Drugs' in The Monthly Homoeopathic Review Vol XXIII April 1st (1879) pp 193-202.

Pope, Alfred C, (M.D.) Brown, Dyce D (M.D.), and Neatby, Edwin N (M.D.)'The Forward Movement' in The Monthly Homoeopathic Review Vol XLII December 1st (1898) pp 705-711

Pope, Alfred C (M.D.), Brown, Dyce D (M.D.), Neatby, Edwin A (M.D.) and Wilkinson, Clement J (M.D.) 'A Modern Proving' in The Monthly Homoeopathic Review Vol XLV January 1st (1901) pp 40-43.

Pope, Alfred C, (M.D.) Brown, Dyce D, (M.D.) Neatby, Edwin A (M.D.) and Wilkinson, Clement J (M.D.) 'A College of Pathogenesy' in The Monthly Homoeopathic Review September 2nd (1901) pp561-563

Pope, Alfred C (M.D.) 'On the Physiological Action and Therapeutic Use of Mercury and its Salts' in The Monthly Homoeopathic Review, May 1st (1902) pp 267-283

Popper, Karl The Logic of Scientific Discovery New York Harper and Row (1959)

Porter, Roy The Greatest Benefit To Mankind: A Medical History of Humanity From Antiquity to the Present Fontana (1997).

Praetzellis, Mary 'Chinese Oaklanders: Overcoming the Odds' chapter 8 of 1-880 Cypress Freeway Replacement Project Report June 2004 edited by Mary and Adrian Praetzellis, prepared by the Anthropological Studies Centre, Sonoma State University California 94928

Price, Eldridge C. (M.D.) 'The Four Pathies; Antipathy, Allopathy, Isopathy and Homoeopathy; Their Place in Therapeutics' in The Transactions of the American Institute of Homoeopathy (1898) pp104-131.

Price, Eldridge C. (M.D). 'In What Particulars Has the Proving of Drugs Deviated from the Rules Laid Down by Hahnemann in the Organon, and in what Particulars do Hahnemann's Rules and Direction for Proving Drugs Differ From, or Fall Short of,

Those Required by the Methods and Precautions of Modern Scientific Research' in The Transactions of the American Institute of Homoeopathy (1896) pp 246-260.

Proctor, Robert N Value Free Science: Purity and Power in Modern Knowledge Cambridge, Mass. London. Harvard University Press (1991).

Rankin, Egbert Guernsey (A.M.,M.D.) 'Observations on the Treatment of Pulmonary Tuberculosis with a Report of the Metropolitan Hospital Infirmary' in The Transactions of the American Institute of Homoeopathy (1903) pp 198-209.

Ravetz, Jerry Scientific Knowledge and its Social Problems (1971).

Report of the Committee on Indigenous Medical Botany in The Transactions of the American Medical Association (1848) pp 336-343

Ritzer George Sociological Theory (5th edition) McGraw Hill International Editions. (2000).

Ritzmann , Iris 'Children as Patients in Early Homoeopathy' in Patients in the History of Homoeopathy by Martin Dinges (ed) European Association for the History of Medicine and Health Publications 2002 pp 119- 140

Rogers, Naomi An Alternative Path: The Making and Remaking of the Hahnemann Medical College of Philadelphia Rutgers University Press, New Jersey and London (1998).

Rothman, Sheila M. Living in the Shadow of Death: Tuberculosis and the Social Experience of Illness in American History by Johns Hopkins Baltimore and London (1994)

Rothstein, W. G. 'Engineers and the Functionalist Model of professions' in Perruci R and gerstl J.E. eds 'The Engineers and the Social System' (1969) ps 73-98.

Rothstein, W.G. American Physicians in the 19th Century: From Sects to Science, Johns Hopkins University Press (1972) (1985).

Sawyer, James M D (Lond M R C P) 'Therapeutic Notes with Especial Reference to the Treatment of Phthisis by Chloride of Calcium' The British Medical Journal June 5 th (1880) p 845

Schiff, Michel The Memory of Water: Homoeopathy and the Battle of Ideas in the New Science, London, Thorsons (1995).

Scott, John and Marshall, Gordon Oxford Dictionary of Sociology, Oxford University Press (2005)

Sherman, Lewis (M.D.) 'On the Proofs of the Presence of Medicinal Powers in Attenuations Above the Sixth Decimal' in The Transactions of the American .Institute of Homeoopathy (1879) 32nd session pp 235-239

Shortt, S.E.D. 'Physicians, Science and Status: Issues in the Professionalisation of Anglo-American Medicine in the Nineteenth Century.' Medical History (1983) 27 ps 51-68.

Sims, J. Marion (M.D.) 'President's Address' in The Transactions of the American Medical Association (1875) pp 91-158.

Skinner, Quentin 'The State' in Political Innovation and Conceptual Change by Terence Ball, James Farr and Russell Hanson (eds) Cambridge University Press (1989) pp 90-131.

Smith A.E. (M.D) 'X- Ray as a Pain Sedative' in The Transactions of the American Institute of Homoeopathy (1907) pp 897-905.

Squires, R.J. Marginality, Stigma and Conversion in the Context of Medical Knowledge, Professional Practices and Occupational Interests. Unpublished PhD thesis, University of Leeds. (1985).

Starr, Paul, The Social Transformation of American Medicine: The Rise of a Sovereign Profession and the Making of a Vast Industry (1982) New York, Basic Books

Stevens, Rosemary Medical Practice in Modern England (1966) New Haven Yale University Press.

Stonham, Thomas George (M.D.Lond. M.R.C.S.Eng.) 'A Study of Natrum Muriaticum' in the Transactions of the British Homoeopathic Society 1910/11 pp 105-126

Stonham, Thomas George (M.D. Lond. M.R.C.S. Eng.) 'Mendel's Law of Heredity: Its Applicability to Homoeopathic Therapeutics and Practice' in the Transactions of the British Homoeopathic Society (1912) pp 1-22

Strickler, David A. (M.D.) 'Comparative Vital Statistics' in The Transactions of the American Institute of Homoeopathy (1898) pp527-545.

Sturdy, Steve and Cooter, Roger 'Science, Scientific Management and the Transformation of Medicine in Britain' c. 1870-1950 in History of Science XXXVI (1998) pp 421- 466

Sutherland, John Preston (M.D.) 'Does Critical Analysis of Drug Provings by the Chart Method Mean Too Much Elimination?' in The Transactions of the American Institute of Homoeopathy (1897) pp 127-148

Sutherland, John Preston (M.D.) 'The Clinical Efficacy and Superiority of the Law of Simialrs: Is IT a Reliable Guide in the Practice of Medicine.?'in The Transactions of the American Institute of Homoeopathy (1896) pp 191-207.

Sutherland, John Preston (M.D.) 'Homoeopathy: What Is It And What Has It Done For Humanity?' in The Transactions of the American Institute of Homoeopathy (1907) pp 72-81

Talcott, Selden H (M.D.), 'Annual Address' in The Transactions of the American Institute of Homoeopathy (1898) pp 19-36.

Tomes, Nancy The Gospel of Germs : Men, Women and the Microbe in American Life Harvard University Press Cambridge Massachusetts, and London England (1998)

Toner, Joseph M. (M.D.) 'Address on Practical Medicine' in The Transactions of the American Medical Association (1874) pp 70-85.

Transactions of the American Medical Association (1874) The Relation of Physiology to the Practice of Medicine pp 153-166 (author not listed)

Tyler, M.L.(M.D.) Homoeopathic Drug Pictures. Daniel (1942) (1995)

Van Denburg, M W (M.D) 'The Experimental Demonstration of the Law of Similars: Can Its Existence and Operation be Proved?' Transactions of the American Institute of Homoeopathy (1896) pp 157-190.

Vermeulen, Frans Synoptic Materia Medica Merlijn Publishers, Harlem, The Netherlands (1992).

Vogel, Morris J 'Managing Medicine: Creating a Profession of Hospital Administration in the United States, 1895-1915' in Granshaw, L and Porter, R The Hospital in History (1989) Routledge, London.pp 243-260.

Wakley, Thomas (M.D.) (ed) 'The Debate on Tubercle' in The Lancet April 5th (1873) pp 490-491.

Wakley, Thomas (M.D.)(ed) 'The Infection Theory of Tuberculosis' in The Lancet of May 8th (1880) (a) pp 727-728.

Wakley, Thomas (M.D.) (ed) 'Crown Appointments of the Medical Council' in The Lancet November 27th (1880) (b) pp 859-860.

Warner, J H. 'Science in Medicine' OSIRIS 2nd series (1985) 1: 37-58.

Warner, J.H. 'Ideals of Science and Their Discontents in Late Nineteenth Century American Medicine.' ISIS 82 (1991) ps 45

Warner, J.H. The Therapeutic Perspective: Medical Practice, Knowledge and Identity in America 1820- 1885 (1997) Princeton University Press.

Warner, J. H. 'Orthodoxy and Otherness: Homeopathy and Regular Medicine in Nineteenth-Century America' in Culture, Knowledge and Healing: Historical Perspectives of Homoeopathic Medicine in Europe and North America Robert Juette, Guenter B Risse, and John Woodward (eds) European Association for the History of Medicine and Health Publications (Sheffield 1998) pp 5-22

Warner, J. H. 'Grand Narratives and Its Discontents: Medical History and the Social Transformation of American Medicine', in Journal of Health Politics, Policy and Law 29 . 4 (2004) 757-780

Weatherall, Mark W. 'Making Medicine Scientific: Empiricism, Rationality and Quackery in Mid-Victorian Britain.' In Social History of Medicine Vol. 9 No 2 (1996) pp 175-194.

Wells, Harlan (M.D.) 'A Practical and Favourable Method of Treating Pulmonary Tuberculosis with Tuberculin in The Journal of the American Institute of Homoeopathy (1912)

Wesselhoeft, Conrad, (M.D.) 'A Re-proving of Carbo Vegetabilis: Made for the Purpose of Demonstrating the Necessity of Counter- Tests in Drug Proving', In The Transactions of the American Institute of Homoeopathy, (1877), 30th session, Vol II no. 2 pp 184-193.

Wesselhoeft, Conrad (M.D) 'A Reproving of Carbo Vegetabilis' in The Transactions of the American Institute of Homoeopathy (1877) pp 98-175

Wesselhoeft Conrad, (M.D.)'Negative Results and Conclusions Concerning Them', in The Transactions of the American Institute of Homoeopathy (1877) 30th session Vol II No 2 pp 194-197

Wesselhoeft, Conrad (M.D.) 'Remarks on Dr. O. Buchmann's Latest Discoveries' in The British Journal of Homoeopathy Vol XL No CLXI July (1882) pp 193- 208

Wesselhoeft, Conrad M.D. 'On the Faith in the Efficacy of Remedies' in Section in Materia Medica in The Transactions of the American Institute of Homoeopathy (1901) pp 580-655

Wheatley, Steven C The Politics of Philanthropy , University of Wisconsin Press (1988)

White, Hayden. Metahistory: The Historical Imagination in 19th Century Europe Johns Hopkins University Press. Baltimore and London (1975).

Winslow, W. H. (M.D).'The Microscope in Practical Medicine', Section XIV, Article V in The Transactions of the American Institute of Homoeopathy 32nd session (1879) pp 33-9.

Winston, Julian The Faces of Homoeopathy : An Illustrated History of the First 200 Years Great Auk Publishing (1999).

Witz, Anne –Professions and Patriarchy Routledge, London and New York (1992)

Worboys, Michael ' Vaccine Therapy and Laboratory Medicine in Edwardian Britain' in Medical Innovations in Historical Perspective ed by JV Pickstone St Martins Press, New York (1992).pp 84-103

Yeo, Richard and Schuster J H (eds) The Politics and Rhetoric of Scientific Method D Reidel Publishing Company (1986) for R Yeo 'Scientific Method and the Rhetoric of Science in Britain 1830-1917.' pp259-297.