The emergence of modern therapeutic similarity

Silvia Waisse Priven (MD MA PhD)

Centro Simão Mathias de Estudos em História da Ciência,
Pontifícia Universidade Católica de São Paulo, São Paulo, Brazil

ABSTRACT

One of the roots of modern therapeutic similarity might be retraced to the work of Samuel Hahnemann at the end of the 18th century. His particular formulation arose from an original synthesis of traditional therapeutic similarity, dating from classic Antiquity and maintained as an undercurrent in medical thinking, and contemporary theories, particularly counter-irritation (antagonistic fever) theory. Against historical readings asserting that modern therapeutic similarity is either a mere continuation of the ancient, or a historical orphan, it is possible to verify that Hahnemann's work belonged within the specific framework of 18th medical science. The formulation of modern therapeutic similarity is best described as a process combining both continuity and epistemological break.

Keywords: History of Medicine; 18th century; Pharmacology; Peruvian bark; Modern therapeutic similarity

Introduction

Much has been written on Samuel Hahnemann's (1755-1843) early ideas and activities leading to the formulation of the "law of similars" and the founding of homeopathy as a definite approach to medicine. This subject seems to exert a kind of fascination in all involved in one way or another in the field of high dilutions (HDs), from basic researchers to the practitioners in the many areas of application. For more than 200 years, a seemingly idiosyncratic habit was developed of including historical considerations, mostly related to Hahnemann, in any thorough discussion of any topic in HDs research and their applications.

This paper addresses the emergence of the modern notion of therapeutic similarity, as it represents a milestone in the history of HDs research. This discussion is also necessary, as the literature on the subject tends to point out to a straight connection between the ancient and modern notions of therapeutic similarity, grounded on the outdated notion of "forerunners". As it was well established by Georges Canguilhem, the persistence of a given *term* along history must not misguide us to believe that also the *concept* attached to it persisted.

Indeed, the opposite is the rule: a same term means something completely different in different

historical settings [1]. This process is more accurately described as a dialectic between continuities and breaks [2].

Thus, one of the first tasks in writing history of science is to understand the meaning of a particular concept in a given moment, which requires to draw the map of the intellectual milieu as well as to unearth the sources employed by a particular scientist in the development of his or her own ideas, together with the contemporary framework in which all these elements are intertwined. Only then, a consistent interpretation of a particular experiment, hypothesis or theory may be suggested.

A further consideration is the care in the choice and reading of secondary literature, i.e. previous studies by other scholars. Writing history of science is no neuter profession: historians are as motivated as any individual by their specific historical conditions and personal interests and goals. We have given an example, in the particular instance of the history of Homeopathy, through the comparison of analyses by Lester S. King and Richard Haehl [3].

In a more general way, two main traditions might be described concerning the history of homeopathy. The first is represented by the "traditional" historians of medicine, such as Paul Diepgen,

Charles Daremberg, Arturo Castiglioni, Pedro Laín Entralgo, among others, all belonging to a time when the history of science was perceived as a continuistic enterprise, grounded on the notion of “progress”.

In this model of analysis, homeopathy was seen as a product opposed to the positive evolution of medicine, a kind of “strange body” tangentially inserted in the mainstream of medical advancement. This interpretation is graphically illustrated in the more recent *Cambridge Illustrated History of Medicine* [4]. The inclusion of Homeopathy is made under a title *separated from the main body of the text*, in the chapter devoted to “alternative” approaches to health formulated by non medical authors, while a different chapter is devoted to 18th century medical “science” and its connections to past and future medicine.

The other tradition is represented by the partisans of homeopathy. According to Robert Jütte, this stance accompanied the new discipline from its inception, possibly due to the need to protect the newborn system from the attacks of the contemporary medical establishment [5].

To this tradition belong the scholars held as “classic” in the history of Homeopathy – Thomas L. Bradford, R. Haehl, Robert E. Dudgeon, Auguste Rapou, Roger Larnaudie and Martin Gumpert, among others. Against all expectations, this tradition also holds that Homeopathy had no links to 18th and 19th century medicine.

A final point concerns the “protagonists” of historical studies, Hahnemann in our case. Most studies, either by professional historians, or HDs-linked researchers and practitioners tend to take Hahnemann’s statements as accurate accounts of events, from his childhood memories to assertions such as “I was the first to...”

However, as in the case of historians themselves, the subjects of research are equally motivated by historical conditions, personal interests and, obviously, their own personality. In another work we have highlighted several cases of inconsistency in self-biographical accounts and misquotations by Hahnemann [6].

These ought not to be taken as attempts to attack his character nor his scientific competence, but as probes into the complex scenario of medicine at the end of the 18th century. The panorama emerging is a most surprising one: against both historiographical traditions, the origins of homeopathy seem to have been deeply intertwined with contemporary perceptions, problems, ideas, theories and practices.

Medicine at the end of the 18th century

As it is known, a view grounded on the ideas by Galen (129-199) dominated alone the medical scenario until the 16th century. In the course of those 1500 years, it was transformed, initially during its process of assimilation by the medieval Arabic culture, and later by the European Renaissance. Although the Arabic doctors introduced new ideas, most of them were developed as answers to problems emerging within the Galenic framework. In the transference of the classic medical texts of Antiquity to the Latin West, these Arabic contributions were intimately intertwined with the original ideas, to finally constitute what is known as “Galenism” [7].

Galenism entered in crisis in the 16th and 17th centuries due to multiple attacks coming from Paracelsus (1493-1541), his disciples and later Iatrochemists; Iatromechanics - an approach to medicine built on Cartesian mechanicism; and more especially, due to the introduction of medicinal substances from the Americas, which could not be included within the traditional pharmacological framework.

The solution to this conflict was sought for through the construction of *medical systems*, which hoped to encompass the countless offshoots of Medicine. The most popular of them all was Hermann Boerhaave’s (1668-1738). His influence helped to draw the map of 18th century Medicine, as the most significant physicians of the time were his direct disciples, including Gerard Van Swieten (1700-1772) and Anton De Haen (1704-1776) – the founders of the *First Vienna School* -; William Cullen (1710-1790), Alexander Monro (1698-1767), John Huxham (1672-1768) and John Pringle (1707-1782) – the main representatives of the *Edinburgh School* -, and Albrecht Von Haller (1708-1777) and Hyeronimus David Gaub (1705-1780) – the foremost influences in Germany. The first generations of Boerhaave’s disciples shaped the medical world in which Hahnemann was first trained and then developed his early career.

Boerhaave’s main principle in medical theory stated that pathology was merely altered physiology, and therapeutics, consequently, the restoration of the normal physiological functions. Consistently, he tried to derivate practice from theory. The latter ought to begin by a few axioms, grounded on empirical evidence, elaborated according to the laws of logic and reason. He urged doctors and students not to invoke first causes, but to restrict themselves to the causes available to direct sense-perception. These would also be characteristic features of Hahnemann’s own approach.

Two other famous framers of medical systems were Friedrich Hoffmann (1660-1742) and Georg E. Stahl (1660-1734), both from Halle. One of the main German disciples of the latter was Johann August Unzer (1727-1799) who, besides authoring a widely read medical textbook for the non professionals, had observed that *tobacco healed the very same diseases it caused* [8].

Many other and less famous systems were also proposed at the time, making the picture of 18th century Medicine a most complex one. This was indeed the perception of the physicians of the second half of the century, to whom, such an extraordinary confusion, together with its failure in everyday clinical practice, were the triggers for deep dissatisfaction and public criticism. From François Boissier de Sauvages de Lacroix (1706-1767), to Philippe Pinel (1745-1826), to Pierre J. G. Cabanis (1757-1808) to Christoph W. Hufeland (1762-1836), to mention a few of the convergent voices, including Hahnemann's, claiming for a solution.

In Germany, this process led to the proposal of several new approaches to Medicine. According to Boerhaave's model and on Kantian epistemological roots, the first director of Berlin University school of medicine, Johann C. Reil (1759-1813) concluded that Medicine would only become rational when it would acquire the status of a *science (Wissenschaft)*, whereas at the same time, his co-director, Hufeland emphasized the essential artistic nature of Medicine (*Heilkunst*), to be effected through a strictly individual approach of each case of disease. Still, against the utilitarian pragmatism of the Enlightenment, more sensitive spirits would seek spiritual elevation through knowledge (*Bildung*) and applied Romantic and *Naturphilosophie* ideas into Medicine. Together with these new proposals, a conservative trend defended the inherited tradition. Its main representative was August F. Hecker (1763-1811), who in 1792 founded the *Journal der Empfindungen, Theorien und Widersprüche in der Natur- und Arzneywissenschaft*, devoted to the combat of every and each new idea [9]. It goes without saying that eventually Hahnemann would become one favorite target.

To summarize, it may be concluded that at the turn of the 18th century, there was not an "official" approach to Medicine in Germany, but that several attempts were in the making in order to open a rational path. Countless doors were opened, including Hahnemann's Homeopathy.

The Peruvian bark puzzle

The history of therapeutics mirrored the history of medicine as a whole. In the particular instance of the *Materia Medica* – i.e. the body of knowledge on

medicinal substances and their applications –, new theories and practices would not substitute the former ones, but would be added to them without any particular criteria along the many centuries. Thus, to the rich inheritance from Antiquity, pharmacological substances and indications were included, coming from the Arabs, their Latin commentators, Paracelsus and the later Iatrochemists and the Iatromechanists. It must be still remembered, the new substances coming from the Americas and the domestic and folkloric remedies, as well as the so-called *Dreckapothek* – an ancient therapeutic practice, which employed excreta and organic parts of animals and human beings [10,11]. Therefore, the 18th century received an exceedingly complex *materia medica* which, besides the large number of substances, the multiple criteria for classification and the heterogeneity of the sources, prescribed extremely complex formulae. As an example, the *theriaca* formulated by Moyse Charas, a 17th century French royal apothecary, included 65 ingredients [12].

In this confuse context, Peruvian bark (*Cinchona* spp.), as a specific remedy for intermittent fevers, stood out as a particularly puzzling problem. In the Galenic framework, it was classified as a bitter substance, therefore it was held as having a hot quality. An antifebrile hot remedy was an inconceivable contradiction. But neither Iatrochemists nor Iatromechanics could offer a better explanation. 18th century vitalists, such as Cullen, would sustain that any medicinal substance was effective through its action on the vital powers – which Cullen characterized as "nervous". In spite of all theories, as H. Ruiz López wrote in 1792, "no one was able to show, beyond all doubts, in what part or principle lie its virtues nor its mode of action in the human body..."[13]

On the other hand, the problem also included the meaning that "fever" had in the 18th century. As a rule, it was assumed that fevers involved *general states* characterized by *chills*, *heat* and *pulse acceleration*. Although the instrumental measure of the body temperature was already known, it was not employed as a diagnostic criterion. Indeed, De Haen had recorded with the thermometer the antifebrile effect of Peruvian bark and had also noticed that *it provoked an increase in the body temperature when taken by healthy individuals*, an effect that he admitted he was unable to explain [14]. It must be remembered that De Haen's work was widely known by the medical community of the time, due to his teaching position in Vienna and the publication of his experiences in the *Ratio Medendi*, translated into German by the Leipzig physician, Ernst Platner (1744-1818).

Similarity, self-experimentation and small doses

It is very well known the early practice of self-experimentation, beginning in classic Antiquity, related to poisons and their antidotes. Galen himself, although remembered by his theoretical advocacy of an *a priori* pharmacognosy grounded on his doctrine of qualities, threaded the experimental path [15]. The empirical approach was also favored in the Latin West beginning at the end of the Middle Ages, still revolving around toxicological concerns. It was only at the beginning of the 16th century that experiments would be conducted, starting with Antonio Musa Brassavola, in order to ascertain the effects of medicinal substances. Conrad Gesner (1516-1565) employed the procedure of self-experimentation to learn the therapeutic virtues of many plants, including black hellebore (*Helleborus niger* L.), white hellebore (*Veratrum album* L.) and tobacco (*Nicotiana tabacum* L.) [16]. It is worthy to remember here that Hahnemann would quote some of Gesner's observations on white hellebore in his first work on *Materia Medica* [17].

With the development of both Iatrochemistry and Iatromechanics – both deeply rooted in observation and experimentation –, the appeal to laboratory experiments began to become systematic, however, more directed to the verification of hypothesis than to the empirical knowledge of the effects of remedies. In the 18th century, although the accent moved to the isolation of the chemical ingredients of substances, the focus also began to be centered on the empirical determination of the therapeutic effects of drugs, independently from any toxicological concerns. Within this evolution, many researchers employed self-experimentation, and by mid-century, Charles Alston (1683-1760), the famous professor of *Materia Medica* at Edinburgh, formulated an encompassing protocol for the study of drugs, which included: 1) assessment of sensorial qualities; 2) qualitative and quantitative chemical assays; 3) *in vitro* testing on blood and serum; 4) toxicological experiments on different animal species, through different ways of administration (external, internal, p.o. and i.v.); 5) macro and microanatomical post mortem observation; 6) self-experimentation; 7) study of published case reports; 8) clinical observations [18].

Among many researchers, of whom we will remember here just a few (Table 1), whose work was perfectly well known by Hahnemann, as he quoted their results in the *Fragmenta*, the first place corresponds to Anton von Störck (1731-1803). Beginning from 1759, he conducted experiments with simple plant extracts – especially the poisonous ones – on animals and himself, followed

by clinical trials in sick individuals. His research was methodologically careful, paying particular attention to the correct identification of materials and employing single substances. To some historians, Störck's work represents the first model of modern clinical and pharmacological experiment, well designed and well recorded [19]. Störck's work was also appreciated in his own time. His writings were translated into German, French, English, Dutch, Portuguese and Turkish. Editions were published in Vienna, Venice, Paris, Aberdeen, London, Naples, Edinburgh, Coimbra, Zürich, Augsburg, Frankfurt, Leiden and Rotterdam [20].

Table 1. 17th & 18th century self-experimenters mentioned by Hahnemann

William Alexander (d. 1783)
Charles Alston
Samuel Bard (1742-1821)
Johann G. Berger (1659-1736)
Moyse Charas (1619-1698)
Samuel Crumpe (1766-1796)
John Freind (1675-1728)
Corbin Griffin (De camphorae viribus, 1765)
Albrecht Von Haller
Friedrich Hoffmann
John Hunter (1728-1793)
Richard Mead (1673-1754)
Alexander Monroe II (1733-1817)
Michael Ward (b. 1762)
Johann J. Wepfer (1620-1695)
William Withering (1741-1799)
Robert Whytt (1714-1766)
George Young (1691-1757)

More specifically, Störck studied the effects of hemlock (*Conium maculatum* L.), thorn apple (*Datura stramonium* L.), henbane (*Hyoscyamus niger* L.), wolf's bane (*Aconitum napellus* L.), autumn crocus (*Colchicum autumnale* L.), Flammulam Jovis (*Clematis erecta* L.), burning bush (*Dictamnus albus* L.) and *Pulsatilla pratensis* (L.) Mill. (subsp. *nigricans*) [21].

His first study was conducted on hemlock, which was performed according a complex research protocol, from the study of the substance to its

testing through several ways of administration, in both animals and human beings, healthy and sick. The account by Störck brings a piece of information relevant to the focus of the present paper. Upon testing the effects of hemlock on himself, he employed several ways of administration, including the instillation of some drops on his tongue. He tells that immediately after, he felt intense pain, attended with stiffness and swelling, which hindered his ability to speak, but “I remembered that *the acids correct the effects of similar remedies*, and decrease their causticity”, thus, he applied lemon juice locally, improving immediately and completely [21].

Störck mentioned this event with no further elaborations, which supplies to us a strong evidence for the fact that the cure through similars was a common-place at the time, together with De Haen’s own use of the same notion in 1759 [8]. Hahnemann himself would attest to this fact, as in his 1790 translation of Cullen’s *Materia Medica* he would explicitly write that the acids were able to heal the same ill states they were able to cause [8]. This makes puzzling Störck’s appraisal of a “hunch” he said he had while studying the effects of thorn apple. The use of this particular plant was forbidden in Medicine due to its toxicity, thus, its potential therapeutic effects were unknown. After conducting the initial phases of its research, Störck says he was clueless concerning its possible indications. It was here that he had his “hunch”:

“As thorn apple, by affecting the spirit, produces madness in the human being, will not it be possible to test whether, by affecting the ideas and the commonsense of the mad and insane spirits, will not make them healthy spirits? If, through a contrary motion, will not it make disappear convulsions in those that suffer from them?” [21]

With this hypothesis in mind, he tested the remedy in cases of dementia and convulsions, obtaining good results. A further aspect of Störck’s research concerns the use of *small doses*. In the experiments of wolf’s bane he employed as the basis a dilution of the extract of the plant in sugar equal to 1.8:100; in the assays of *Pulsatilla*, 1:100.

Thus, it can be safely asserted that therapeutic similarity, self-experimentation and small doses had already been established at least thirty years before Hahnemann conducted his seemingly first experiment with Peruvian bark.

Hahnemann’s breakthrough: the 1790 experiment with Peruvian bark

There are no documents available allowing to establish, beyond all doubts, the path followed by

Hahnemann in the development of his thinking. The first record of a shift in his mind appears as a commentary in a footnote in his translation of Cullen’s *Materia Medica*. The text immediately allows inferring that *Hahnemann had a hypothesis previous to the actual experiment*: “... the substances that provoke a form of fever (...) extinguish the types of intermittent fever”. In other words, he already had a rudimentary notion, or anticipation, of the future “law of similars” [14]. Therefore, upon performing the self-experimentation of Peruvian bark, he *expected it to provoke, in a healthy human being, some form of fever*. Thus, the results could not have been any surprise; in fact, were Peruvian bark *not* to provoke symptoms similar to intermittent fever, this would have been truly unexpected.

Thus, what needs to be explained is how Hahnemann arrived to the formulation of such hypothesis. His starting point was that some substances – coffee (*Coffea arabica* L.), pepper (*Piper nigrum* L.), arnica (*Arnica montana* L.), Ignatia amara (*Strychnos ignatia* Lindl.) and arsenic were able to heal fevers because *they were able to provoke fever on healthy human beings* [8]. In the 1780s, the effects of the intoxication with coffee and arsenic were well known, as well as their ability to elicit phenomena similar to the ones in fevers. Arsenic elicited a “hard and accelerated pulse” and “cold chills”; in another footnote to Cullen’s work, Hahnemann stated that arsenic was as efficient as Peruvian bark to avoid the recurrence of paroxysms in intermittent fevers. The healing action of pepper in intermittent fevers – surprisingly, due to its *heating* effect – had already been stated by Cullen himself in the book [14].

An explanation is more difficult in the case of arnica and ignatia. Cullen described the latter as the strongest bitter substance known, able to heal intermittent fever, although he doubted whether this effect was due to its bitter quality or to a potential narcotic power, shared in higher or lower degree by all bitter substances. However, this representation does not allow inferring that Ignatia also elicited a kind of artificial fever.

In order to give an answer in both cases, Rudolph Tischner sought in Hahnemann’s later *Pure Materia Medica* among the symptoms reported by “other authors” and found in arnica, “short and gasping breathing; quick pulse; sweating”, and “sweating; internal trembling”, in Ignatia [8]. We repeated this search in *Fragmenta*, obtaining similar results.

Nevertheless, these symptoms are not sufficient to justify a hypothetical “fever” elicited by none of both. Tischner suggests that perhaps Hahnemann had verified such “forms of fever” in his clinical

practice. However, he asks a more daring question: might it be possible that Hahnemann *had already conducted experiments with remedies before the one with Peruvian bark*? He backs this possibility by reminding that Hahnemann was already acquainted with the technique of experimentation on the healthy via Störck – and other authors, as we have shown above – and by an alternative reading of a later assertion by Hahnemann, in the chapter on *China* in the *Pure Materia Medica*, stating that in 1790 he had conducted the *first pure* proving of Peruvian bark. According to Tischner, the German construction of this sentence leaves the door open to the possibility of Hahnemann conducting previous “non pure” experiments.

Unfortunately, this reading will have to remain as purely hypothetical, as there are no documents available to ascertain the origin of these ideas of Hahnemann’s.

Further evidence is supplied by the instance of ipecacuanha (*Psychotria ipecacuanha* (Brot.) Stokes). In this same work by Cullen, Hahnemann explains that some forms of intermittent fever, especially the consumptive ones, where Peruvian bark could be lethal, could be healed through the *artificial fever* elicited by ipecacuanha when prescribed two or three hours before a febrile paroxysm [8].

The theory of antagonistic artificial fever: Übelkeitkur

As Hahnemann theory was grounded on the notion of “artificial or antagonistic” fever, we need next to approach this subject. Hahnemann had already introduced it in his 1789 *Instructions for surgeons concerning the venereal diseases* [22], which, furthermore belonged to the medical ideary of the time [8,14,23,24]. According to Tischner, this might be subsumed under the generic term of *Übelkeitkur*, meaning the cure of diseases through diseases. This notion was no novelty in Hahnemann’s time, as it was known since Antiquity, and it was widely employed in practice in the 18th century, by prominent physicians such as Boerhaave, Hoffmann and Van Swieten [8,25]. The only dissenting voice we could find is Haehl’s, who sustained that this idea of Hahnemann’s was “against the current view at this time” [26]. Incidentally, Van Swieten employed arsenic and pepper to provoke this healing fever, which serves as a corroboration for the ideas discussed above.

It is possible to retrace the direct influence of *Übelkeitkur* doctrine in Hahnemann’s thinking. In 1773 he had translated Christian Nugent’s *Essay on Hydrophobia* which advocated the theory of *artificial disease substitution*, i.e. the substitution of

a natural disease by an artificial – medicinal – one, thus, the treatment of rabies was to be grounded on stimulating and irritant remedies, instead of the usual sedatives [27].

More direct was still the influence of John Hunter’s *theory of counter-irritation*. In his *Treatise on Venereal Diseases* (1786), he stated that a living organism could not be attacked at one same time by two diseases, thus, “(...) two different fevers cannot exist in a same constitution (...) at the same time”, thus *mercurial fever* could not coexist with the venereal disease” [28].

Another source explicitly mentioned by Hahnemann is Christoph Girtanner (1760-1800), who had stated that mercury was only able to destroy the “venereal virus” after having altered the *reactive powers* of the animal functions, dismissing, in this way, the possibility of a direct chemical action [22].

In the *Instructions*, Hahnemann would synthesize all these notions in his own explanation of the mode of action of mercury in the treatment of syphilis. His main argument stated that mercury was not able to act by itself, but that it required a *previous reaction of the ‘powers’ of the whole system*, a *specific* alteration of the body, i.e. *mercurial fever*, whose symptoms he described in full detail. At this moment, he admitted he was not yet able to establish the exact workings of mercurial fever, positing three possibilities: two chemical hypothesis, and a third “vital” one – later called dynamic – here called “specific irritation”. Shortly, either mercurial fever would “direct” the mercury dissolved in the bodily fluids in its attack against the poison, or it elicited a peculiar alteration in the metal, turning it fit to chemically neutralize the virus; or still, mercury extinguished the venereal *irritation*, through its “*specific irritation... of the full sensorial system*”.

This hypothesis was backed by observations which showed that other “irritant” remedies – albeit unspecifically – were able to elicit improvement in venereal diseases, either in combination with mercury, eliciting an *accidental fever*, which stimulated the “nervous power”, favoring in this way the action of the metal; or, directly by themselves, as the *counter-irritation* they induced altered the morbid disposition of the primarily affected parts. Incidentally, we would like to highlight this use of the term “nervous power” – and possibly also the notion attached to it - to name vitality, coming from Cullen.

Hahnemann immediately applied all these ideas to his elaboration on the mechanism of action of the remedies against fever. In further footnotes to Cullen’s *Materia Medica* he stated that the

antagonistic fever of Peruvian bark, the *artificial fever* of ipecacuanha and the *arsenical fever* were all *similar to mercurial fever in syphilis* [14]. The following year, in his commentaries to his translation of 1788 Donald Monro's (1727-1802) *materia medica*, he would further explain:

"(...) Take into account my commentary to Cullen's *Materia Medica*, stating that '*Peruvian bark... vanquishes and makes silent the fever in intermittent fever due to the production of a particular fever*' and it is not hard to explain this paradox. All substances which provoke *counter-irritation* and *artificial fever*, when taken before a febrile attack are as *specific* [as Peruvian bark] in intermittent fever, only that not always as safe as it." [29]

And still in Cullen's *Materia Medica*:

"(...) the extract of quassia and bile are more bitter and astringent than Peruvian bark, but they are unable to heal any chronic quartan fever; if he [Cullen] would have had a hint of a power in Peruvian bark to provoke an *artificial antagonistic fever*, (as *perhaps (vielleicht)* it has been found in a visible degree through *newly discovered ways*)..."

In his translation of Monro's book, Hahnemann exposed in a very clear way his thinking at the time, oscillating between traditional ideas and the theory of *Übelkeitkur*. Against Monro's objection against *Übelkeitkur* as a general treatment in fever, Hahnemann stated:

"(...) No one is saying that *Übelkeitkur* is to be recommended as the general treatment for each and every fever. When upper eliminations are needed, and this is established fact, it is prescribed a full dose of an emetic. Who may dare to deny this and prefer the crude *Übelkeitkur*? However, in the case of insidious fever of unknown cause, where the vital force is inactive by itself, there is no other remedy more able to provoke a *new, stronger and more beneficial fever* than the one produced by nature. Whoever controls *Übelkeitkur* will have a remedy able to shake the indolent nervous system, to wake it up from slumber to action, without disturbing the vital energy or overstimulating the circulation of the blood, and this without the less loss of strength as possible."

As an evidence for the widespread use of the notion of *Übelkeitkur* and counter-irritation in contemporary Therapeutics, we quote the statements of two famous authors. Hufeland asserted that,

"(...) diseases and remedies are two contra natural states. The prescription of a remedy involves the *production of an artificial disease* in order to destroy the natural one (...) Remedies act through an

artificial disease. Each disease means an irritation (...), if the remedy is stronger than the [natural] disease, the latter is healed." [24]

Historian Kurt Sprengel, upon commenting Hahnemann's works, would write in 1805,

"In his general theory on the *materia medica*, Samuel Hahnemann presents a very interesting research, bringing back the ideas of the ancient Methodists, concerning the irritability of the body; through a good induction, he showed how most of the violent specific remedies may become useful, through the production of an *artificial irritation*, similar to the effects of the disease. He verifies in practice the *usual observation* that, through artificial reaction, the morbid excitation is suppressed. Hahnemann's theory is *perfect*." [8]

To summarize, it is possible to infer that the possibility of healing *febres febribus* – according to G. Bayr's paraphrase – belonged with the medical ideary of the times, and it was the result Hahnemann had expected in his experiment with Peruvian bark. Hahnemann had elaborated a hypothesis concerning its mode of action as a specific remedy in intermittent fever: antifebrile remedies were able to heal fevers *because they were able to produce an artificial fever*. Therefore, Peruvian bark also ought to be able to produce an artificial fever in a healthy individual. Further, he had a legitimate tool to test this hypothesis: experimentation on the healthy, including self-experimentation.

Epilogue: (Dis)continuities

The results of the experiment are known: Peruvian bark indeed provoked an artificial fever in Hahnemann, experimentally confirming his hypothesis. It would further supply another and unexpected result: such artificial fever was not merely generic, but Peruvian bark would elicit in the healthy the characteristic clinical picture of the *same* intermittent fever it was able to heal. Peruvian bark did not provoke on the healthy an unspecific antagonistic fever, but it reproduced the exact clinical picture of the malaria it healed. That is to say, *remedies would produce artificial diseases similar to the natural ones they were able to heal in a specific way*.

This could no longer be included within the current notion of *Übelkeitkur*. An epistemological break had been operated, implying the passage from "unspecific simile" – counter-irritation, *Übelkeitkur*, *febres febribus* – to "specific simile", according to Tischner's suggestion. Hahnemann would test this hypothesis along the next six years, until he felt it

was mature enough as to be presented as a theory and research program [30].

Without a thorough mapping of the ideas current in Hahnemann's times, it is easy to misconclude that modern therapeutic similarity is either a "historical orphan" or a "direct product of Ancient notions". On the opposite, Hahnemann was fully adapted to his own times. He had received the standard medical training, he began his career according contemporary guidelines, shared the same doubts and questionings as his fellow doctors. His choice of Peruvian bark as his subject of study is also consonant with the times' *Zeitgeist*, as it represented one of the main medical puzzles. Hahnemann's early career was, thus, consistent with the interests, theories and methods of the times. So common-place might have rated his initial observations, that he chose to present them as *footnotes* to the works by other authors.

In this way, the aspect of *continuity* in Hahnemann's early ideas cannot anymore be contested, even against his own statements, "I was the first to..." What remains to be explained is the articulation of the *break* that modern therapeutic similarity would eventually represent regarding conventional Western medicine.

As it has been shown above, Hahnemann conducted his pioneer experiment within the framework of 18th century medicine. He was not the first or only one. Just as one example, Störck had the same tools available – therapeutic similarity, experimentation on the healthy, small doses. Besides the most obvious difference – i.e., Hahnemann grounded his research on the hypothesis of antagonistic artificial fever, while Störck did not – the axis of the epistemological break operated by Hahnemann seems to consist in a *conceptual resignification*. What jumps to our eyes is his construction of therapeutic similarity as an *original synthesis of ancient and contemporary ideas*. The new formulation proposed a specific antagonism, which allowed integrating the problem of the specific remedies with the ancient doctrine of therapeutic similarity. In this way, modern therapeutic similarity emerged as a *des(continuity)* within the framework of 18th century science.

References

- [1] Canguilhem G. L'objet de l'histoire des sciences, in, Études d'histoire et de philosophie des sciences concernant les vivants et la vie. Paris: J Vrin; 1994.
- [2] Alfonso-Goldfarb A, Ferraz MHM, Beltran MHR. A historiografia contemporânea e as ciências da matéria: uma longa rota cheia de percalços. In: Alfonso-Goldfarb AM, Roxo Beltran MH, editors. Escrevendo a história da ciência: tendências, propostas e discussões historiográficas. São Paulo: Livraria da Física/Educ/Fapesp; 2004. 49-73.
- [3] Waisse Priven S. Historiographical aspects in homeopathy. Cultura Homeopática. 2003; 2(5): 61-67
- [4] Porter R, editor. Cambridge illustrated history of medicine. Cambridge: Cambridge University Press; 1996.
- [5] Jütte R. The historiography of nonconventional medicine in Germany: a concise overview. Med History. 1999; 43: 342-358.
- [6] Waisse Priven S. Hahnemann: um medico de seu tempo. Articulação da doutrina homeopática como possibilidade da medicina do século XVIII. São Paulo: Educ/Fapesp; 2005.
- [7] Debus AG. A chemical key to the Scientific Revolution. In: Aceves Pastrana P, editor. Farmacia, historia natural y química intercontinentales. México DF: Universidad Autónoma Metropolitana Xochimilco; 2000. 17-33.
- [8] Tischner R. Geschichte der Homöopathie. Leipzig: Wilmar Schwabe; 1932-1924.
- [9] Broman Th. The transformations of German academic medicine, 1750-1820. Cambridge: Cambridge University Press, 1996.
- [10] Roxo Beltran MH. O europeu diante da flora do Novo Mundo. In: Alfonso-Goldfarb AM, Maia CA, editors. História da ciência: o mapa do conhecimento. Rio de Janeiro/São Paulo: Expressão e Cultura/EDUSP; 1995. 479-489.
- [11] Cabanès A. Rémedes d'autrefois. Paris: A Maloine; 1910-1913.
- [12] Charas M. Histoire naturelle des animaux, des plantes & des minéraux qui entrent dans la composition de la Thériaque de Andromachus. Paris: Olivier de Varennes; 1668.
- [13] Ruíz López H. Quinología, o Tratado del árbol de la Quina o Cascarilla. Madrid: Marin; 1792.
- [14] Bayr G. Hahnemanns Selbstversuch mit der Chinarinde im Jahre 1790. Heidelberg: Karl E Haug; 1989.
- [15] van de Eyck PJ. Galen's use of the concept of 'qualified experience' in his dietetic and pharmacological works. In: Debru A, editor. Galen on pharmacology: philosophy, history and medicine. Leiden/New York/Köln: Brill; 1997. 35-57.
- [16] Barthel I. Arzneimittelversuche des 19 Jahrhunderts am gesunden Menschen im

deutschesprachigen Raum [Dissertation (Doctorate)]. Düsseldorf: Medizinischen Fakultät der Universität Düsseldorf, 1982.

[17] Hahnemann CFS. *Fragmenta de viribus medicamentorum positivis in sano corpore observatis* 1805. Napoli: Typis Observatoris Medicis; 1824.

[18] Maehle A-H. *Drugs in trial: experimental pharmacology and therapeutic innovation in the eighteenth-century*. Amsterdam/Atlanta: Rodopi; 1999.

[19] Habrich Ch. *Characteristic features of eighteenth-century therapeutics in Germany*. *Clio Medica*, 1991; 22: 39-49.

[20] National Health Institutes, Catalog of the National Library of Medicine. Bethesda: U.S. National Library of Medicine; 1993- [updated in 2008 Jan 25; cited 2008 Jan 30]. Available from: <http://www.ncbi.nlm.nih.gov/sites/entrez?db=nlmcatalog>.

[21] von Störck A. *Études de thérapeutique expérimentale*. Paris: JB Baillière; 1887.

[22] Hahnemann CFS. *Instructions for surgeons respecting venereal diseases, together with a new mercurial preparation*. In: Dudgeon RE, editor. *The Lesser Writings*, 1851. New Delhi: B.Jain; [s.d.]. 35-42.

[23] Vigarello G. *Le sain et le malsain: santé et mieux-être depuis le Moyen Âge*. Paris: du Seuil; 1993.

[24] Hufeland CW. *L'art de prolonger la vie humaine*. Lausanne: Hignon; 1809.

[25] Daremberg Ch. *Histoire des sciences médicales*. Paris: Baillière; 1870.

[26] Haehl R. *Samuel Hahnemann: sein Leben und Schaffen*. Leipzig: Willmar Schwabe; 1922.

[27] Pinet P. Paracelse, Nugent et Boyle, le 'Tria Prima' d'Hahnemann. *Homéopathie Fran*, 1989; 77 (1): 54-65; 77 (2): 57-66.

[28] Coulter HL. *Divided legacy: a history of the schism in medical thought*. Washington: Center for Empirical Thought; 1994.

[29] Monro D. *Chemisch-pharmaceutische Arzneimittellehre*. Leipzig: G E Beer; 1791.

[30] Hahnemann CFS. *Versuch über ein neues Prinzip zur Auffindung der Heilkräfte der Arzneisubstanzen, nebst einigen Blicken auf die bisherigen*. [Hufelands] *J. d. pract. Arzkd*, 1996. In: Schmidt JM, Kaiser D, editors. *Samuel Hahnemann: Gesammelte kleine Schriften*. Heidelberg: Karl F Haug; 2001. 76-98.

Licensed to [GIRI](#)

Support: author declares that this study received no funding

Conflict of interest: The author is an Editor of IJHDR.

Received: 14 February 2008; Revised: 03 March 2008; Published: 31 March 2008

Erratum: 30 Dec 2008. (http://www.feg.unesp.br/~ojs/zacha_ijhdr/erratum/?v=7&i=22&pi=22)

Correspondence author: Silvia Waisse Priven, silvia.priven@gmail.com ; <http://www.pucsp.br/pos/cesima>

How to cite this article: Waisse Priven S. The emergence of modern therapeutic similarity. *Int J High Dilution Res* [online]. 2008 [cited DD Mmm YYYY]; 7(22): 22-30. Available from:

<http://www.feg.unesp.br/~ojs/index.php/ijhdr/article/view/252/335>.