

# ¿Qué es la semiótica médica?

## What is medical semiotics?

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### ABSTRACT

This paper attempts to provide insight into a basic question, what is Medical Semiotics? Semiotics as a subject has been applied to many areas of work ranging from Art, Biology, Education, Music, and Zoology to name just a few. However the medical side of semiotics, despite having an intricate connection to the origins of semiotics itself has not drawn as much attention as other disciplines within the science of signs. This paper starts by giving an overview of the historical foundations of Medical Semiotics, its use in 18th and 19th century European Pathology, Diagnostics and Nosology, which is followed by examples of contemporary literature on the subject, and concludes with hypotheses on where the discipline may yet go. It is the author's assertion that Medical Semiotics has a long and important history, which is often overlooked both in medicine and also in semiotics. And if the discipline is going to continue to exist it will have to incorporate both theory and practice into its descriptions of pathology and diagnosis.

*Key words:* Medical semiotics, semiotics, hospital semiotics, history of diagnosis

### RESUMEN

Este documento intenta proporcionar una mirada hacia una pregunta básica, ¿qué es semiótica médica? Semiótica como una materia se ha aplicado a muchas áreas de trabajo que van desde arte, biología, educación, música y zoología para nombrar solo algunas. Sin embargo el lado médico de la semiótica, a pesar de tener una conexión intrincada a los orígenes de la semiótica en sí misma no ha atraído tanta atención como otras disciplinas dentro de la ciencia de los signos. Este artículo comienza dando una descripción de las fundaciones históricas de la semiótica médica, de su uso en los siglos dieciocho y diecinueve en patología europea, del diagnóstico y de Nosología, que es seguido por ejemplos de la literatura contemporánea en el tema, y concluye con las hipótesis en donde la disciplina puede todavía ir. Es la afirmación del autor que la semiótica médica tiene una larga e importante historia, que es a menudo pasada por alto en la medicina como también en semiótica. Y si la disciplina va a continuar existiendo, tendrá que incorporar la teoría y la práctica en sus descripciones de la patología y el diagnóstico.

*Palabras clave:* semiótica médica, semiótica, hospital semiótico, historia de diagnóstico

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## Introduction

This paper attempts to provide insight into a basic question, what is Medical Semiotics? Semiotic as subject has been applied to many areas of work ranging from Biology (Biosemiotics), Zoology (Zoösemiotics), Ethics (Semioethics), Education (Edusemiotics) and many other subdisciplines such as Mycosemiosis (Kræpelin, 2003) – the semiotic processes in fungi, or its Biosemiotic correlate Phytosemiosis (Krampen, 2003).

Just as others have tried to address exactly what semiotics is in a more general context (Deely, 1976, 2011; Eco, 1976; Laferrière, 1977; Rattasepp & Kull, 2015; Sebeok, 1986; Sless, 1986). The author is not the first to attempt to define their particular area of interest in semiotics, take for example the works that have supposed the question, *what is Biosemiotics?* Such as (Barbieri, 2008a, 2008b, 2009a, 2009b; Martinelli & Bankov, 2008). This paper will attempt to replicate some of the processes found in these works, namely what literature exists on the Medical Semiotics? How has it evolved and changed? And what does the future hold for the subject area? If one were to look for a textual definition of Medical Semiotics, the *Routledge Companion to Semiotics* provides an excellent overview of the subject from Greek antiquity to modern praxis, explaining it as:

*Semiotic* comes to us exclusively out of ancient Greek medical practice where *semiotike* stood for the process that professional physicians followed in evaluating signs of body disorder understanding their cause, offering therapy where beneficial, and prognosticating the patient's future. Thus *semiotics* as developed by Peirce and others, *medical semiotics* as a subdiscipline of today's *semiotics*, and diagnostic practice in Western medical practice (sometimes referred to as *semeiology*) trace their origins to the same era... As indices, the signs produced by the body are typically con-

sidered to be semiotic phenomena, but have been of lesser interest to most semioticians because they are not thought to be culturally constructed and symbolic. Peirce spent little time dealing with the sign or symptom of bodily disorder (Cobley, 2009, p. 264).

The text goes on to list seven key features of Medical Semiotics, an abridged version of which is given below:

1. Every sign expressed on or within the body is a form of communication.
2. Medical semiotics investigates how healers know what they know and to what extent this knowledge is affected by events and beliefs beyond the biology of the body.
3. Limitations are imposed by technology, economics, politics, and belief systems upon the healer's and the patient's ability to generate and incorporate signs.
4. Patients are often assigned to specific categories of disease, deformity and defect in order to create for them a separate and undervalued identity.
5. The sign or symptom is always polysemous.
6. A patient's sign (objectively produced clinical indications) and symptoms (subjectively produced by the patient) may bear little relationship to any internal event but are culturally/socially constructed narratives.
7. Patients construct for themselves stories of illness separate from those narratives generated by the physician (ibid., p. 265).

The definition given here by Cobley (2009) encompasses the entire gamut of Medical Se-

miotics, from its use in the old world up to the present day. Whereas what the term constitutes has altered through history, for example in the 18<sup>th</sup> century Hess (1998) suggests that Medical Semiotics was an empirically driven and theoretically informed precursor to the modern science of diagnosis. And this lasted up until perhaps the last publication on semiotics in medicine as a distinct topic was released- *Lehrbuch der Semiotik für Vorlesungen* written by Albers (1834). After which the subject was subsumed into Diagnostics and Pathology (Polianski, 2015). However, the Hellenic and Mesopotamian approach (Manetti, 1993, 2010), will differ from the empirically driven pre-Saussurean, Pre-Peircean 18<sup>th</sup> and 19<sup>th</sup> century applications in Europe, just as other approaches will have altered in relation to the current practices of clinical reasoning.

That is not in any way to state that the classical application of Medical Semiotics is devalued, as Cobley (2009, p. 264) stated “*semiotic comes to us exclusively out of ancient Greek medical practice*”. And so in many ways there is any unavoidable invocation of Hippocrates and the Greek tradition when talking of Medical Semiotics. Given that Semiotics and Medicine in the Western tradition share a common foundation, in that they both have a father in the works of Hippocrates (Kleinpaul, 1893). That is to say semiotics and medicine are both the progeny of Hippocratic traditions, and hence there is a tendency towards Western medical practice. But as Manetti (2010) has shown, in realty Medical Semiotic practices pre-date Greece, and so the praxis of the Aymaras, Quechuas or Shipibo-Conibo or other indigenous cultures is just as important. From an anthropological perspective these cultures are perhaps more valid because their practices can still be observed, ancient Greece although fascinating is long dead.

## Content

### 18<sup>th</sup> and 19<sup>th</sup> Century Literature

During the 18<sup>th</sup> century in Europe one could still find German and Russian doctors

writing about Medical Semiotics, such as Fedorovich and Hippus (1892)’s work *Semiotics and Diagnosis of Childhood Diseases* (Semiotik und Diagnostik der Kinderkrankheiten). Or Hufeland (1823) in the Journal of Obstetric Practice who wrote *On the value and importance of semiotics* (Ueber den Werth und die Bedeutung der Semiotik), similarly Becker (1832) addressed the role of semiotics in relation to cardiology in his *On the physiology and semiotics of cardiac activity* (Zur Physiologie und Semiotik der Herzthätigkeit). Interestingly, the first volume of Sundelin, Berends & Albers’s (1830) publication *Handbuch der praktischen Arzneiwissenschaft oder der speziellen Pathologie und Therapie* is titled *Handbuch der Semiotik*. Not to be confused with the later namesake by Nöth (2000). Other German and Dutch Medical Semiotics works from this period include (Boerhaave, 1751; Gaub, 1797; Nicolai, 1756). The legacy of the 18<sup>th</sup> and 19<sup>th</sup> century German Medical Semiotics was perhaps an influence on the works of Thure von Uexküll, as one of the originators of a modern movement in Medical Semiotics and psychosomatic medicine, see Von Uexküll (1979, 1982, and 1986).

Whilst there is ample literature on Medical Semiotics, the 18-19<sup>th</sup> century period represents an epoch of particular significance. It represents the transition from Medical Semiotics being a discipline within medicine, to one that has come into the purview of the *Semiotician Ordinaire* (Levy, 1999). For example, with the exception of the psychiatric semiotic literature and the works of Giorgio Prodi (Prodi, 1981; Giorgio Prodi, 1988; Giorgio Prodi, 1988) or Burnum (1993) most of the authors in the literature cited in following sections of this paper are semioticians with an interest in medical topics, rather than clinicians with an interest in semiotics.

In this period, Hess (1998, p. 205) drawing on Hufeland (1826) argued that when “semiotics was at once the grammar of nature’s language and the linguistics of the physician’s art, medical semiotics was to be entitled to partic-

ipate in the theoretical basis of the sciences”. Perhaps with the exception of the addition of biosemiotics to contemporary discourses on theoretical biology, Hufland’s depiction on semiotics no longer applies. This gives testimony to the fact that Medical Semiotics is no longer on the curriculum of medical schools, but has passed into the remit of semioticians proper.

### 20<sup>th</sup> century Literature

In probably the only 20<sup>th</sup> century monograph on Medical Semiotics Bær (1988, p. 1) states that the “art of healing, in Greek antiquity, was called *technē semeiotike*, a craft of having to do with signs”. This term he describes as meaning a *semiotic craft* or “the skill to interpret semeia, *signs*” (ibid., p.41). Although with the use of *technē* he is clearly invoking Heidegger (1953, 1954), Bær progresses to Sebeok (1978, p. 181) to give an effective definition of Medical Semiotics as a *tripod of medicine, linguistics and philosophy*. Baer went to suggest that the value of applying semiotics to medicine was that it can provide medicine with: “A grammar of signs, refining the syntax of symptoms, disclosing their pluridimensional semantic richness, and proposing a dialogistic pragmatics of how to interact with the patient” (Bær, 1988, p. 2).

This grammar of signs could be related through Peirce’s triadic system (Peirce, 1998) as Ladino (2014) has done, or through Saussure (1916) or another framework such as the ones given previously that relate more to the Latin period. Whichever paradigm one wishes to situate a system of medical signs in, the issues still remains that “*in medicine the many ways in which we talk about symptoms constitutes our experiences of them*” (Bær, 1988, p. 5). Hence in the 20<sup>th</sup> century we have come to view Medical Semiotics just as Sebeok (1978, p. 181) defined it, as a mixture of *medicine, linguistics and philosophy*.

### Contemporary (late 20<sup>th</sup> and 21<sup>st</sup> century) Medical Semiotic Works

In the Anglophone world Medical Semiotics has not propagated a large body of litera-

ture in comparison to other semiotic disciplines of a more literary or typically biological nature. Medical semiotic literature covers texts that are concerned with general issues in the topic such as (Bær, 1988; Brands, Franck, & Van Leeuwen, 2000; Crookshank, 1923; Hess, 1998; Kahn, 1981; Nessa, 1996; Rogers & Swadener, 2001; Sebeok, 1985, 2001; Skopek, 1979; Staiano-Ross, 2011; Staiano, 1979; Van Den Broek, 1987; Von Uexküll, 1982, 1986), others focus on the semiotics of specific medical conditions and treatments such as general issues in Neuro-linguistics (Andrews, 2011; Chernigovskaya, 1999; Laughlin, McManus, & Stephens, 1981; Lavorel, 1984), or specific conditions in neuro-linguistics such as aphasia (Landzelius, 2009; Novaes, 2013; Price-Williams & Sabsay, 1979; Volpe, 1991), Dementia (Fleche, 2009), Alzheimer’s (Donnelly & Lilly, 1998; Gubrium, 1988). Similarly Neuro-semiotics is covered by (Favareau, 2002; Roepstorff, 2001), Psychiatry/Psychotherapy by (Ablamowicz, 1994; Aragno, 2011; Craig, 1997; Davtian & Chernigovskaya, 2003; Donnelly, 1984; du Plessis, 2012; Keinänen, 2003; Kuperman & Zislin, 2005; Lee & Bette, 2000; Mildenberger, 2004; Peyrot, 1987; Rausch, 1995; Shands, 1970a, 1970b; Stampfl, 2013). Other conditions addressed in the literature include:

- Suicide (Utriainen & Honkasalo, 1996)
- Diagnostics (Burnum, 1993; Kahn, 1978)
- Clinical Medicine (Chinen, 1988)
- Gerontology (Stafford, 1988)
- Psychosomatic medicine (Langewitz, 2009)
- Homeopathy (Schemm, Konitzer, Freudenberg, & Fischer, 2002; Walach, 1991), Menstruation (Mazaj, 1995)
- Anti-depressants/ Depression (Catt, 2012; Donnelly & Irvin, 1990)
- HIV (Ferguson, 2013; Namaste, 1993; Rose, 1993; Scalvini, 2010; Tulloch, 1992)

- Therapy (Kozin, 2003)
- Drug Therapy (Schonauer, 1993)
- Anorexia (Prewitt, 1992)
- Obesity (Anderson, 1993; Herndon, 2005; Jutel, 2005; Murray, 2007), Schizophrenia (Frow, 2001; Osatuke et al., 2010)
- Prescription of medicine (Nuessel, 2002)
- eHealth (Caiata & Schulz, 2010; Camerini, Diviani, & Tardini, 2010; Green, 2010; Neuhauser & Kreps, 2010; Orizio & Gellatti, 2010; Schulz & Rubinelli, 2010)
- Autism (Oakley & Vidanović, 2014; Smith & Bell, 2001)
- Osteopathy (Gaines & Chila, 1998)
- Nursing (Donnelly, 1987)
- The use of medical tools (McRoberts & Sears, 1998)
- Health promotion (Brookes & Harvey, 2014)
- Chronic disabilities (Connolly & Craig, 1996; Stockall & Stickels, 2000),
- William's Syndrome (James, 2009)
- Sign theory in Greek Medicine (Manetti, 1993)
- Fibromyalgia (Quintner, Buchanan, Cohen, & Taylor, 2003)
- Immunology (Sercarz & Celada, 1988)
- Chronic pain (Honkasalo, 2000, 2001; Priel, Rabinowitz, & Pels, 1991)
- And Symptomology (Bær, 1982; Dominick, 1980; Donnelly & Langley, 1987; MacBryde & Blacklow, 1971; Sebeok, 1986; Staiano-Ross, 2012)

The literary semiotics of medical discourse is addressed by (Genosko, 1989; Schmid-Bortenschlager, 2000), analysis of

medical texts by Kahn (1980) and semiotic depictions of medical issues through other media such as cinema (Hirschman, 1995), and photography (Johnson, 1994). There are of course German texts on the subject from this period primarily by the hand of Thure Von Uexküll concerning psychosomatic medicine, most prominently his *Lehrbuch der psychosomatischen Medizin* (Von Uexküll, 1979) and *Grundfragen der psychosomatischen Medizin* (Von Uexküll, 1985). A comprehensive list of Thure's work, including many medical texts can be found in Kull and Hoffmeyer (2005) and Köhle (2003). More generally one could point to Freud (1936) and other Germanic psychoanalytic works. In addition one should not neglect the contributions in Italian of the oncologist Giorgio Prodi (Prodi, 1981; Giorgio Prodi, 1988; Giorgio Prodi, 1988). There are also Francophone contributions on the topic such as Barthes (1972) *Sémiologie et médecine*, or Foucault (1963) *Naissance de la Clinique*. Again if one approached the Spanish literature one can find papers in such places as *Signa. Revista de la Asociación Española de Semiótica*, such as Pensado (2014) who analysed the diffusion of early medical texts or Soláns (2014) who explained the role of Alzheimer's in the novels of Iris Murdoch. These publications are of course, of a more generalised nature.

Some medical conditions have been covered in more detail than others in the Medical Semiotics literature, such as breast cancer. For example Wagner (2005) discusses the semiotic role of breast cancer ribbons and their commercialisation. Breast cancer and identity as a literary-semiotic construct is addressed by Henriksen and Hansen (2009), and as an auto-ethnographic experience in Sontag (1977). Similarly DeShazer (2012) covers the semiotics of breast cancer from a photographic narrative. More photographic data on the topic was utilised by Jay (2012) in the SCAR project, and the semiotic issues around mastectomy are addressed by Cobb and Starr (2012). Authors such as Gryder, Nelson, and Shepard (2013) have worked on a Biosemiotic explanation of cancer from a

genomic perspective, with reference to breast cancer. Crompvoets (2012) addressed the disconnect between the marketing literature of breast prosthesis (as a result of mastectomy) and the direct experiences of the patient. Eleanor Donnelly and Klonowski (1994)'s paper investigated the intersection of breast cancer and semiotics through a data driven, anthropological approach. Other papers connecting breast cancer and semiotics come from the 2012 Social Semiotics Journal special issue on breast cancer: (Ehlers, 2012; Ehlers & Krupar, 2012; Krupar, 2012; Roskelly, 2012).

There are many related Biosemiotic, social medicine and Medical Humanities texts that could be cited in relation to Medical Semiotics. Without doubt there are more publications in the Medical Semiotic arena that the author has omitted especially when one has to draw a line between where disciplines such as psychiatry and medicine become independent subjects. Similar arguments can be made between the borders of Biology and Medicine in Biosemiotics, such as the work by Hoffmeyer (2008) on the semiotics of the body, which could be the body of any mammal, human or animal. Or the work by Anna Aragno (2012) on the marriage of Psychoanalysis and Biosemiotics. There will be many topics in other languages that the author does not have the skill to access, such as the Russian language works of Вещин and Терещенко (1990) on the semiotics of breast cancer. This short inchoate inventory does highlight some of the subject areas covered in Medical Semiotics and the dominance of literature on psychiatry or psychotherapy related topics.

#### Discussion - the Future of Medical Semiotics

As has been shown, the historical and current application of Medical Semiotics has more depth and breadth than one might initially think. The future of the subject however is far from certain. It may be possible that the *Humanising Turn* in medicine that is occurring in North America and Europe (Downie, Hendry, Macnaughton, & Smith, 1997; Kimball, 1973)

could provide scope for Medical Semiotics to play a greater role in the education and practice of medicine. Looking to the future, one way of integrating Medical Semiotics into medical practice could be to develop the work of Kahn (1981) and her concept of *Hospital Semiotics* which links Medical Semiotics with medical services and institutional research, creating a blend of praxis and theory; just as Burnum (1993) advocated that Medical Semiotics should be applied. It is also this blend of theory and science that Medical Semioticians in 18<sup>th</sup> century such as Hufeland (1826) found so effective, and which would seem to be the correct direction for the discipline to progress in.

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