

**The elementary forms of the medical life:
sacred and profane in biomedical cosmology**

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Abstract

This thesis examines the place of metaphor in biomedical knowledge about two major public health problems: cancer and coronary heart disease (CHD). Specifically, it considers why cancer is constituted by biomedicine in obviously metaphorical concepts that are also highly pejorative. Conversely, the metaphorical dimension of the biomedical knowledge concerning CHD is less obvious and less negative in its connotations.

This thesis posits that the difference in linguistic styles associated with cancer and CHD can be accounted for by whether knowledge about them confirms or challenges the knowledge and value system of modernity. Cancer, as construed by biomedicine, appears to confound some important tenets of the epistemology and knowledge of modernity. In particular, it confounds the idea that the body is a machine and that nature is an inert order obeying objective laws. It thus suggests that the universe, including that of bodies, is not entirely subject to rational understanding and control. Women having irrational bodies and an affinity with unruly nature are primary sites for cancer. It is therefore hardly surprising that cancer's metaphors express a fear that order based on masculine rational agency is fragile. By contrast, biomedical knowledge about CHD appears to confirm key aspects of modernist knowledge. Specifically, it suggests that the (masculine) body can be understood as a machine that exists as part of a wider domain of nature that is inert and is fuelled by objective laws. Unlike cancer, which is depicted as mysterious and arcane, CHD is presented as an ailment with causes that are well understood and treatment that is effective, thus affirming the truth of rationality and technology. Coronary heart disease is construed overwhelmingly as a disease affecting men exercising their capacity for rational agency, free from the 'dictates' of an irrational body. Coronary heart disease is depicted as a disruption of supply and demand rather than as a threat to social order itself.

In Durkheimian terms, sacred things can be pure and beneficent or they can take impure and threatening forms. Cancer expresses the impure, threatening dimension of sacredness in exposing threats to the knowledge and order of modernity. Conversely, coronary heart disease is profane, in those terms, since it offers apparent confirmation of the knowledge and order of modernity. Cancer makes us aware of deeply held values by making us conscious of threats to them but the knowledge of CHD is so congruent with the knowledge system of modernity, that it does not provoke us to examine that framework; it merely affirms our routine and mundane view of the world.

These findings suggest that biomedicine can be regarded as a secular religion because it acts as a cosmology. Knowledge of the body and its ailments is set within a wider conceptual framework and value system recognizing and naming sources of order and danger. This further suggests that while biomedicine may be rightly regarded as a technical and instrumental body of knowledge, it is nevertheless fuelled by and intertwined with deeply held values and convictions that are beyond the domain of rationality. The unexamined, a-rational elements of biomedicine have been virtually ignored within public health and explain some of its limitations in defining and responding to familiar public health problems.

Declaration

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university and, to the best of my knowledge and belief, the thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis. I consent to the thesis being made available for photocopying and loan, if deposited in the Library, if accepted for award of the degree.

Signed _____
Jane Edwards

Date _____

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Introduction

The background to this thesis

This thesis has undergone considerable evolution and significant elements of my biography are intertwined with these pages. My early academic training in anthropology and history stirred my interest in the significance of symbolism and my conviction that contemporary phenomena are best understood in historical perspective. Taking one of life's left turns, I became a nurse after my honours degree and, once qualified, worked in an oncology unit for a few years, acquiring a certain level of technical knowledge about cancer and its treatment. However, the technical detail existed alongside my awareness of the profundity of the issues the job entailed: hope, suffering, fear, courage, and life and death were daily elements of my working life; as they would have been in many other nursing specialities. Without having heard of Susan Sontag, I witnessed the power of words and the weight of covert meanings they carried for those with cancer, their friends and families, as well as for those of us who cared for them.

After a few years of oncology nursing I decided to pursue a career as an academic. For a variety of reasons, I chose to undertake a PhD in an academic department of public health, initially looking at the role of language in constructing the experience of cancer. I also began working as a neophyte academic and that experience began to change the shape of my thesis. Simultaneously, I was discovering a Durkheim that I had not encountered as an undergraduate. This Durkheim was not a rabid positivist interested in manipulating variables, nor a myopic structural functionalist. This 'new' Durkheim was interested in the power of symbolism, treated notions of the 'sacred' respectfully rather than reductively, and announced, long before Foucault, that knowledge was socially constructed (Durkheim 1965). I had, of course, read Sontag's *Illness as Metaphor* (1987) by this time and was impressed by her deft analysis of the pervasiveness and power of metaphor and the way it created the meanings associated with diseases. However, I was perturbed that she clearly let biomedical knowledge 'off the hook', as not implicated in the crimes of which she accused metaphor. While I did not know whether biomedical knowledge was metaphorically constructed, the literature I had been reading on the sociology of medical knowledge suggested that it could not be regarded as an a-social, value free truth. My experience in oncology had also made me aware of the power of biomedical language and that it was not a value-free, or innocent, vocabulary.

One of the subjects I taught stipulated that students undertake a research project on both cancer and coronary heart disease as public health problems. As I read their work and listened to their oral presentations, I was struck by the relative equanimity of their approach to coronary heart disease (CHD) and the mixture of reverence and dread their discussion of cancer evinced. Cancer was accorded an almost mystical status while CHD was regarded as mundane by contrast. This sense was reinforced by recollections (from my nursing days) that cardiology nursing was perceived as ‘clean’ while oncology was, as I was told more than once by colleagues attempting to be sympathetic, ‘dirty nursing’. In addition, the heroism of trying to save the lives of cardiac ‘patients’ was contrasted strongly to the supposedly bleak and unrewarding task of caring for people who were, in many instances, dying. Equally, listening to my student’s work, I wondered why the perception existed that ‘we’ understand and treat coronary heart disease well, while ‘we’ grapple less successfully in understanding and treating cancer. The epidemiology of cancer and CHD did not sustain these perceptions, nor did survival rates for the two ailments. Finally, while it seemed obvious that concepts such as ‘aggressive cells’ were metaphors, the notion of the heart as pump seemed accepted as merely a literal truth. Why should this difference exist and what was its significance?

What had previously been done in the field?

Sontag (1987) showed that metaphors are the basis of the meanings linked to diseases. The study of metaphor has been dominated by disciplines other than sociology, notably psychology, education and the philosophy of language and of science (Ortony 1993: X111). It has also been investigated within anthropology. Mary Douglas (1978), while not explicitly labeling her work a study of metaphor, considered the way in which social organization metaphorically constituted understanding of the biological body. Later, American anthropologist Emily Martin investigated the way metaphor shaped medical knowledge of physiological processes undergone by (most) women: menstruation, childbirth and menopause (Martin 1989). Where, I wondered, was the sociological literature examining the role and social significance of metaphor in biomedical thought? By the time Martin’s (1989) work appeared, the content of biomedical knowledge was squarely on the theoretical and empirical agenda of the sociology of health and illness. Wright’s and Treacher’s landmark *The Problem of Medical Knowledge* had been published in 1982 setting out the premises of a ‘new school’ of thought—constructionism—and offering case-studies demonstrating its analytical utility. Nevertheless metaphor figured only in one of the case studies in that volume, Marcovich’s historical essay on the work of an English physician (Marcovich 1982).

The study of metaphor within the discipline of anthropology has proved very fruitful. Mary Douglas' *Natural Symbols* (1978) took an explicitly Durkheimian approach to her topic, examining how society constrained perception of and response to the body. Her work has been a profound influence in the sociological and anthropological study of the body (Shilling 1994) and has also made a significant contribution to the study of pollution and notions of risk (Turner 1991). However, Douglas' analysis made no reference to biomedical knowledge of the body or disease. Martin's work (1989) examined how metaphors intersect with social interests through the medium of knowledge. Her analysis is an elegant account of how the capitalist mode of production and a set of metaphors based on the concept of productivity intertwine in the production of medical knowledge about women's bodies. Montgomery (1991) demonstrated the ubiquity of metaphor in biomedical thought and also revealed how some metaphors become accepted as literal truth over time, thus hiding their metaphorical origins. Later work by Martin (1990; 1993) demonstrated the way aspects of social organization in late capitalism metaphorically framed medical understanding of the immune system and its disorders. In a study of the metaphors linked with AIDS, cancer and heart disease, Weiss (1997) shows how each of them articulates different aspects of social life.

This small body of literature indicates how useful a study of metaphor is for analyzing the diverse and frequently symbolic influences on the formation of biomedical thought. Weiss's work (1997) however does not focus explicitly on the role of metaphor in the construction of biomedical knowledge. While Montgomery (1991) does take biomedical knowledge as his focus, he does not analyze how metaphor shapes biomedical understanding of particular diseases. Martin's work, (1989; 1990; 1993) while being close to my own interests, offered no comparative analysis of the metaphorical 'framing' of different diseases by biomedicine. The differences of meaning associated with and the differing attitude to cancer and coronary heart disease seemed worthy of investigation. Nor was I convinced that Martin's (1989) framework would offer the only way of understanding this difference. The kinds of meanings linked to both cancer and coronary heart disease seem to have strong affinities with Durkheim's notion of a religious distinction between sacred and profane entities. Further his argument that science and religion are structurally and functionally similar is intriguing and has received little attention within the sociology of health and illness. Anthropologists have investigated the link between healing and religious systems in 'exotic' societies but not in the setting of the contemporary 'West' (Comaroff 1982). Sociologists have asserted that that biomedicine is a secular religion (White 1991; Turner 1995) but this claim has failed to generate substantive investigation within the sub-discipline.

An analysis of biomedical knowledge of cancer and coronary heart disease would identify whether that knowledge is constituted through metaphor and, since metaphors generate the meanings attributed to diseases, it would also shed light on whether they were accorded different meanings by biomedicine. It also provided a test of my ‘hunch’ that the different meanings I suspect are attributed to them can be explained by Durkheim’s concepts of sacred and profane. Accordingly, I undertook a thematic analysis of biomedical writing on cancer and coronary heart disease. Thematic analysis is a variant of content analysis in which key themes are identified (Daly; Kellehear and Gliksman 1997: 134-135). More detail on the rationale for text selection and the method of analysis is provided in the methodology Chapter.

This thesis thus addresses the following questions:

- Is biomedical knowledge of both cancer and coronary heart disease metaphorically constituted knowledge?
- Does biomedical knowledge express or constitute different attitudes to these disorders?
- How do the meanings associated with each ailment link to social and cultural concerns?
- Do the concepts of sacred and profane help explain attitudes and medical knowledge of cancer and coronary heart disease?
- Can Durkheim’s claim that science and religion are both religious enterprises be applied to biomedicine?

The answers to those questions in this thesis will add to sociological knowledge about the influences on the production of biomedical knowledge by examining the link between metaphor, medical knowledge and religious symbolism. It may expand awareness of the range of influences that have traditionally been considered in the formation of medical knowledge. The notion that religious symbolism, expressed in the distinction between things that are sacred and profane, may play an important part and under-recognized role in the production of medical knowledge has scarcely been considered in the sociology of health and illness. For several years now, I have earned my living as a ‘public health academic’ and I will therefore briefly consider some of the implications of this thesis for public health in its conclusion.

I do not, however, critically evaluate the concepts of sacred and profane as originally developed by Durkheim. Rather, I apply them in a relatively abstract way, seeking to discover whether they have heuristic value in analyzing the metaphors associated with cancer and coronary heart disease. Nor do I consider cases that might be anomalous for Durkheim’s concepts of sacred and profane. As valuable as such work would be, it is beyond the scope of

this thesis. The work set out here is a ‘first-step’ in exploring how Durkheim’s work might inform more thorough investigation of the link between metaphor, religion (cosmology) and medical knowledge.

Thesis structure

Given the paucity of sociological literature on the relationship between metaphor and medical knowledge, the options for a conventional literature review were limited. Accordingly, I reviewed the approaches to medical knowledge by what I considered to be the epistemologically distinctive schools of thought in the sociology of health and illness—‘phenomenological’ approaches, those perspectives deriving from Marxist thought and, lastly, constructionism.

In chapter two, I outline Durkheim’s theory of the homology of science and religion, assessing whether biomedicine qualifies as cosmology in Durkheimian terms. I then outline his theory of sacred and profane and discuss contemporary assessment and use of these concepts. Finally, the chapter takes a brief detour into some aspects of seventeenth century intellectual history to examine the foundations of modernist thought because the origins of modernist cosmology are to be found here.

My epistemological premises and methodological principles are outlined in chapter three. This chapter also outlines my method of selecting material for analysis and the method I used in assaying these documents.

Chapter four focuses on metaphors associated with cancer. I briefly sketch some aspects of the way cancer has been conceptualized in the history of ‘Western’ medical thought. The two biomedical accounts that were dominant in the 20th Century—immunology and molecular biology—are then outlined. Each account offers a metaphor of society and the basis of social order. The same metaphorical repertoire, centring on deviance is utilized by both theories, though they accent somewhat different dimensions of it. Both accounts, however, are linked by the themes of gender and disorder.

A brief history of ‘Western’ medical thinking about the heart begins Chapter five—the concept of heart disease did not begin to take shape until the latter part of the nineteenth century. The twentieth century definition of the cardio-vascular system and of coronary heart disease is discussed. Coronary heart disease, including its causes and mechanisms, is framed around a central metaphorical understanding of society as a market, requiring a balance of

supply and demand. The biomedical account of coronary heart disease is metaphorically linked to notions of gender and rationality.

In chapter six I outline the key elements in the metaphors that are implicated in medical knowledge of cancer and coronary heart disease. I analyze them in relation to key elements of modernist cosmology.

Chapter seven re-visits the argument that biomedicine can be considered a cosmology because it construes the 'universe' of modernity as embodying a set of dichotomous qualities that look very much like those normally addressed by religion. In particular, cancer and coronary heart disease do metaphorically represent the attributes of sacred and profane, as identified by Durkheim. I briefly consider the implications of this framework for sociological approaches to health, illness and healing, as well as for public health responses to them.