Article

# Critical Medical Anthropology in Midwifery Research: A Framework for Ethnographic Analysis

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#### **Abstract**

In this article, we discuss the use of critical medical anthropology (CMA) as a theoretical framework for research in the maternity care setting. With reference to the doctoral research of the first author, we argue for the relevance of using CMA for research into the maternity care setting, particularly as it relates to midwifery. We then give an overview of an existing analytic model within CMA that we adapted for looking specifically at childbirth practices and which was then used in both analyzing the data and structuring the thesis. There is often no clear guide to the analysis or writing up of data in ethnographic research; we therefore offer this *Critical analytic model of childbirth practices* for other researchers conducting ethnographic research into childbirth or maternity care.

### **Keywords**

anthropology, medical, childbirth, ethnography, midwifery, methodology, research design, qualitative analysis

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#### Introduction

In this article, we discuss the use of critical medical anthropology (CMA) as a theoretical framework for research and set out the adaptation and use of a particular analytic tool for use with CMA-based ethnographic research in the maternity care setting. The study, the doctoral research of one of the authors of this article (Newnham), was an ethnography of a hospital labor ward, which sought to critically examine the increasing use of epidural analgesia in labor by exploring the personal, social, cultural, and institutional influences on women making this decision. Examining epidural analgesia use was an entry point into hospital birth culture, where we also expected to gain deeper insight more generally. However, there is no obvious guidance for conducting ethnographic research; from field-note writing to analysis, there is no definitive research script to follow (see Emerson, Fretz, & Shaw, 1995; Van Maanen, 2011).

While this makes ethnography a creative and interesting methodology, it can also be overwhelming to the novice researcher. For Newnham, this meant wading through primary ethnographies and books and articles about ethnographic fieldwork, writing, and method, where she eventually stumbled on an analytic model—Baer, Singer, and Johnsen's (1986) *Levels of Health Care Systems*. Finding this model was one of those rare, sweet moments

in the PhD journey, as all of the disparate strands of thinking suddenly came together to form a coherent structure—not only for data analysis but also for the structure of the thesis itself. In this article, we offer our adapted version of this analytic model for use by others and describe the way it was used to analyze the data and also structure the thesis. First, we discuss CMA as a health research methodology, then introduce the way in which CMA was used—in concert with Foucault and feminist theory—in the thesis, before introducing the *Critical analytic model of childbirth practices* 

Ethics approval for this study was gained from the participating university and health service's respective Research Ethics Committees. Written consent was gained from the women who participated in the study. Consent for the site observation was more difficult to obtain and this has been discussed elsewhere (Newnham, Pincombe, & McKellar, 2013). Once Newnham had access to the field, hospital staff were widely informed and given the opportunity to opt out.

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Therefore, consent was on a continuing basis with health care staff; no one actually opted out of the study.

# Methodology: CMA

CMA, a term coined by anthropologists Merrill Singer and Hans Baer, who were integral in its development, emerged in the 1980s as a critique of traditional medical anthropology (Singer & Baer, 1995). Originally, a branch of anthropology, medical anthropology tended to take Western medicine (biomedicine) at face value, acting as a cultural translator for biomedicine to better understand miscommunication in medical encounters, to provide a layperson's perspective, or to increase medically recommended behaviors such as taking medication (Singer & Baer, 1995). Medical anthropology, therefore, though potentially useful, was not necessarily reflexive or critical in its understanding of biomedicine, and worked primarily within the auspices of medical authoritative knowledge.

There was, however, increasing concern within medical anthropology to examine biomedicine as closely as other cultural systems, and to culturally situate its belief systems, rituals, and values in the same way as other cultural domains. CMA therefore takes a critical stance in the study of biomedical culture. Rather than working as its cultural mediator, it questions medicine's portrayal of itself as an objective adjudicator of truth and fact that is somehow removed from cultural influences (Singer & Baer, 1995). Further to this, there was a drive to understand the way in which power relationships in medicine facilitated the global capitalist economy, and to ensure that medical anthropology did not become "like biomedicine, an unintended agent of capitalist hegemony" (Singer & Baer, 1995, p. 5).

CMA therefore attempted to move the attention of analysis away from the phenomenology that accompanied more traditional medical anthropology (the "sufferer experience") to identification of how this sufferer experience is shaped by social and political forces. It links these two levels of analysis by maintaining a focus on the micro-experience of the individual, but within the context of the macro-structures that influence political and social life (Singer & Baer, 1995). It is important to note here that there is also a radical phenomenological branch of CMA; however, for the purposes of this article, we are referring to CMA that uses a political economy (Marxist or neo-Marxist) approach, examining the historical development of the economic and political circumstances that led to the situation in question. This wide-lens view of historical and social influences prior to focusing in on the ethnographic minutiae of the everyday allows for the dissection and critique of behaviors, practices, and beliefs that are otherwise accepted or taken for granted as the status quo. Therefore, both micro-experiential and macro-structural issues are considered when looking through the CMA lens.

## CMA for Midwifery Research

Using a political economy of health framework, such as CMA, is apposite for midwifery research because midwifery is intrinsically associated with the politics of health and public health outcomes in its role providing primary care to childbearing women and their families—an acknowledged starting point for the well-being of society in general (Högberg, 2004; World Health Organization [WHO], 2009). As a profession, midwifery acknowledges its commitment to health outcomes for women and children (International Confederation of Midwives, 2016; WHO, 2015). Midwifery is therefore an inherently political profession, with an emancipatory mandate, and is actively involved in the politics of normalizing birth (Australian College of Midwives, 2016). Midwifery, as a discipline, is consequently well placed to examine and document the power dynamics of birth. Most pertinently, midwifery has had a millennia-long relationship with birthing women, and a more recent confrontational and oppressed relationship with medicine (Donnison, 1988; Ehrenreich & English, 1973; Murphy-Lawless, 1998; Towler & Bramall, 1986; Willis, 1989). Although this history has been examined in depth, and should be considered a point of departure for future inter-professional relationships, this power imbalance must be transparent in any discussion of birth practices to prevent it being recreated. Understanding how women experience their pregnancy, birthing, and breastfeeding bodies is dependent on examining macro-social influences, as women's bodies do not exist in isolation from their surroundings (Dykes, 2009).

Thus, CMA, with its focus on power and emancipation, is an appropriate vehicle for research about midwifery or child-birth practices (Dykes, 2009). CMA and the consideration of economic, political, and ideological contexts was therefore chosen as the primary theoretical lens of this research, with specific reference to the historical co-location of science and medicine as producers of powerful ideological discourse, and their influence on the consequent medical interpretations of women's bodies and childbirth.

# Micro-Macro: Bridging the Analysis

It has been argued that the link between micro-culture and macro-structure has often been left out of analyses (Singer & Baer, 1995; Willis, 2006). Attention to the micro sphere is necessary for identifying existing practices and experiences, whereas attention to the macro sphere is important for unearthing the cultural beliefs and perspectives that perpetuate these practices and experiences. As Young (2005) substantiates, "macro structures depend on micro-level interactions for their production and reproduction, but their form and the ways they constrain and enable cannot be reduced to effects of particular interactions" (p. 20). Identifying the structural processes and institutional practices that link the two are fundamental to the emancipatory

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goal of CMA analysis and were therefore central to the research thesis.

To address this, we used a combination of theoretical perspectives and identified the role of the institution itself—as an arbiter between macro-influence and micro-experience as a central focus of analysis (Lazarus, 1988; Singer & Baer, 1995; Willis, 2006). Therefore, although the primary theoretical framework was CMA, Foucauldian and feminist theory also provided congruent and supporting contexts for discussing these questions. We drew on the more subtle poststructuralist concerns of perpetuated discourses and their implication in surveillance and discipline of the body. Leaning into post-structuralism was relevant because obstetric medicine is largely maintained through a biomedical hegemonic discourse that privileges technology and "complex practices" (see Newnham, McKellar, & Pincombe, 2016; Waitzkin, 1983). These supporting theoretical perspectives are commensurate with CMA methodology, which recognizes the subtle ways in which hegemonic discourses assert power through language, symbolism, and meaning, rather than overt mechanisms of control (Singer & Baer, 1995).

## Data Analysis: Navigating the Field

Data were collected primarily during a 6-month period of fieldwork in a hospital labor ward, and consisted of field notes, hospital and policy documents, and sequential, indepth interviews with 16 women. Field notes were handwritten, and then transcribed into a word document. Interviews were recorded and the audio files were also transcribed into word documents. Data were interpreted and analyzed as they were being collected, as described below.

According to Hammersley and Atkinson (1983), the first step for analyzing data is familiarity; in becoming familiar, the researcher starts to "use the data to think with" (p. 178). Newnham stayed "close" to the data, reading and re-reading text, focusing in on particular moments, then re-reading the data set as a whole, in an attempt to ensure inclusivity and an assurance that analysis was not solely focused on the comments that captured imagination (Braun & Clarke, 2006, p. 89). Searching for "discontinuities" and pieces of data that disprove an obvious line of thinking provides rigor and aids perspective (Emerson et al., 1995, pp. 178–179).

In ethnographic research, the process of *writing*, in and of itself, is seen as an important tool of analysis. Goodall (2000) states,

My point is that where you write field notes, or what you compose them on, doesn't have to follow a prescribed format. You write what you need to write, to record what you need to record, whenever, wherever, and however you can. *Editing and reflecting* on them, however, is a very different activity . . . While I am doing this, I begin to see patterns in the fieldwork

that correspond to personal experiences and pieces I've read. (p. 119, emphasis in original)

Through writing and rewriting, concepts become clearer as patterns are formed. Newnham wrote all the way through the doctoral research process, keeping a reflective journal of thoughts, important notes or questions, and links to key literature. She wrote her field notes long hand and in the margins wrote memos that began the process of analysis. Sometimes the margin memo would be a question, which she would then follow up when next in the field. Sometimes it was noticing the glimpse of a pattern, which could be sought out in previous field notes to see whether there was, in fact, any pattern there. She also presented the emerging findings at conferences and in journal articles, submitting the analytical process of writing to the rigor of peer review.

In ethnography, the analysis of data is not a distinct stage of the research. It begins in the pre-fieldwork phase, in the formulation and clarification of research problems, and continues into the process of writing up: "formally, it begins to take shape in analytic notes and memoranda; informally, it is embodied in the ethnographer's ideas, hunches, and emergent concepts" (Hammersley & Atkinson, 1983, p. 174). Moreover, and somewhat obtusely, ethnography typically does not require a specific analytic framework, but has relied on detailed descriptions of meaning that have been elaborated on in monographs or essays (Van Maanen, 2011), and referred to as "interpretation" or "reading" of the data (Ezzy, 2002, p. 103). There are helpful descriptions, such as Geertz's (1973) concept of "thick description." Geertz (1973) suggests that "culture is not a power, something to which social events, behaviors, institutions, or processes can be causally attributed; it is a context, something within which they can be intelligibly—that is thickly—described" (p. 13).

In an attempt to make sense of the ethnographic analytic process, Newnham drew on the concept of "thick description," which resonated with her use of a constructivist theoretical framework and the need to look beyond the micro-analysis of practice. Armed with the ethnographic analytic tool of writing, as well as thick description, the analysis was progressing, but still Newnham struggled with how exactly she was going to shape the analysis. After much reading, writing, and thinking, she eventually stumbled across Baer et al.'s (1986) figure Levels of Health Care Systems which depicts various levels of health care and their corresponding level of analysis—and the pieces fell into place. Here was an analytical tool within the discipline of CMA, which gave shape and structure to both the analysis and the thesis. Once she had found this model, Newnham adapted it for midwifery and birthing culture in a model now titled the *Critical analytic model of childbirth practices.* 

The CMA position is guided by an awareness of the social and political influences on health, with an emphasis on agencies and delegations of power, and the ways in which power

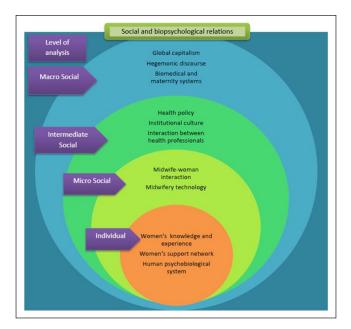


Figure 1. Critical analytic model of childbirth practices. Source. Adapted from Baer, Singer, and Johnsen (1986, p. 96). The authors have received permission to reproduce the image from Elizabeth Newnham's unpublished PhD thesis from the copyright representative of the University of South Australia.

is expressed within biomedicine and health care systems (Baer et al., 1986). Singer and Baer (1995) continue,

Further, high on the agenda of this approach is the exploration of the implications of all of these issues at the micro-level of individual experience and behavior; with the ways in which social conflict and oppressive experience is somatized or embodied in illness, and illness, in turn, becomes an arena for both resistance and political conscientization. (p. 62)

For the purposes of our research, rather than the experience of illness, we reframed this idea around the experience of birth and the ways in which hegemonic discourses have been embodied or resisted by women and midwives.

The original Levels of Health Care Systems (Baer et al., 1986) figure illustrated the political underpinnings of CMA and identified four system levels (e.g., the capitalist political economy) and the corresponding level of analysis (e.g., macro-social level), which we replicated in the adapted model. It highlighted the influence of one system level on another and therefore provided a suitable organizational framework to the study. Figure 1, the Critical analytic model of childbirth practices, shows how Newnham adapted the Levels of Health Care Systems framework for use in midwifery research showing four system levels in maternity care and the corresponding level of analysis. The original figure consisted of two arms extending from the macro-level; one for cosmopolitan (bio) medicine and one for heterodox (alternative) medicines, allowing for the comparison of competing medical discourses. Although we recognize that

competing discourses exist in maternity systems, there is also a distinctiveness to childbirth and midwifery practice that we thought absolved the need to present a second arm signifying a plurality of alternative medical models. We have therefore taken a singular, rather than dualistic, approach as represented by the concentric circle.

The macro-social level of analysis can include political economic factors, dominant discourses, and biomedical models. The intermediate-social level refers to local policies, institutional culture, and inter-professional relationships, whereas the micro-social focuses on the midwife-woman relationship and midwifery knowledge and practice—which we have termed Midwifery technology. The individual-level analysis reflects how these overarching levels of health care affect the woman and her own knowledge, practice, and experience within the dynamics of her biological, psychological, and social world. Singer and Baer (1995) emphasize that these levels of analysis are not exclusive. Rather, the model works as a heuristic device to assist with understanding the complexity of social forces and where they might sit in relation to each other and to the process of data analysis. As stated above, this device was used to structure the thesis, and used as an analytic framework.

Using this framework aided all stages of the analysis, but particularly with moving from informal ideas to the more formal methods of analysis. The model reinforced our use of theory in the initial chapters, and led to a descending (or "funneling"; Hammersley & Atkinson, 1983, p. 220) analysis of the effects of each structure on the one below. As Hammersley and Atkinson (1983) and others (see Brouwer, Drummond, & Willis, 2012) point out, a simple display of data or text is not a satisfactory analysis—themes cannot just be trotted out like so many ponies, but need to be guided by the reins of theory. The use of this model led to a sufficiently complex and multilayered analysis that was supported both by the data itself and also the considered use of theory. Because of this, the chapters that described the theoretical framework and reviewed the literature, rather than preceding the analysis proper, became a part of it, forming the macrosocial level of the analytic model. However, once the analysis had been "funneled" through the various steps of the model—narrowed down through the theory to the data—the view was again broadened out to pull the concentration away from small pieces of text to once again focus on the whole (as far as this is possible; see Emerson et al., 1995).

# Writing Structure

As we have already discussed, the *Critical analytic model of childbirth practices* provided a scaffold against which both the data were analyzed and assembled, and around which the thesis itself was constructed. After first setting out an introductory chapter and a second chapter on the research design and analytic framework, which introduced the *Critical analytic model of childbirth practices*, the thesis followed a basic

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structure that reflected the model's four levels of analysis: macro-social level, intermediate-social level, micro-social level, and individual level. Chapter 3 set out the three theoretical cornerstones of the research: CMA, Foucauldian, and feminist theory. This chapter commenced the macro-level analysis of the research. Here, not only were the main tenets of the theoretical framework outlined, but the stage was set with the macro-analytical backdrop: how CMA positions biomedicine as a dominant social force, the influence of science and technology on shaping Western understanding, using Foucauldian interpretations of power/knowledge to further examine the link between discourse and practice, and drawing on feminist analyses to demarcate the construction of the female body within these the power/knowledge frameworks of Western science.

The macro-level analysis continued in Chapter 4 with a critical review of the literature. Placing the literature review in Chapter 4 rather than the usual Chapter 2 or 3 of a thesis meant that the methodology could first be outlined and the literature review relocated to its position in the macro-social level of the analytic framework. After a brief historical introduction to birth analgesia, the influence of scientific and medical discourse on understandings of women's bodies and the process of birth were investigated more thoroughly. Having already acknowledged the influence of biomedicine as a dominant discourse within the neoliberal political economy, the cogent and symbiotic discourses of evidence-based medicine and technology were explored with a focus on how they influence current biomedical knowledge about epidural analgesia. Teasing out the mechanisms of power within these discourses enabled a discussion of knowledge production, important because much of what constitutes Western knowledge assumes science and technology to be value-neutral (Navarro, 1986; Sandelowski, 2002).

Advancing further down the analytic funnel, from the macro-perspective of the preceding chapters, Newnham conducted an intermediate-level analysis of institutional culture and micro-level analysis of midwifery practice. Chapter 5, the first of the data chapters, presented the setting both physically and culturally, drawing on the positioning of the institution in CMA theory and Foucault's conceptions of panoptic surveillance and the medical gaze. Using fieldnote data and centering on two disparate notions—organizational and midwifery technologies—institutional influence on time, organization of labor and birth, risk and safety, and midwifery practice were examined, identifying the institution as a dynamic contributor to discourse formation. Chapter 6 continued the intermediate-level analysis with a critical discourse analysis of policy and practice documents, which built on the critical literature review of Chapter 4. Drawing on field-note data, an exploration of how practices at the micro-level were fashioned as either risky or safe was conducted (see Newnham, McKellar, & Pincombe, 2015). The way in which the risk/safety discourse was constructed at the individual level was then investigated, highlighting the real-world impact of dominant discourses on the way women interpreted their choices. Chapter 7 also focused predominantly on individual-level analysis, coming from the women's interview data, merging again with micro-level analysis as she related these data with the midwives' views that had been collected in field-note form. These findings included women's perceptions of trust in the corporeal nature of their birthing bodies and need for midwifery support and guidance in labor. The thesis was then resolved in Chapter 8 where the primary findings were reiterated and final conclusions drawn.

#### Conclusion

Although we are not specifically presenting any of the findings in detail here, we hope that demarcating the analytical process and thesis structure used will be useful to others. One of the difficulties with ethnographic research can be the lack of formalized research process. We do not propose stifling the creativity that ethnography inspires, nor that the model be strictly adhered to in an analytic sense, for example, there is choice between various theoretical frameworks or the ways in which the role of the institution is interpreted, yet it could provide a useful guide for others who are considering critical research into birth culture and practice. Whereas many models of critical analysis recognize the impact of dominant discourses on practice and experience, the *Critical* analytic model of childbirth practices highlights the various levels of influence and provides an explanatory framework with which to link macro-social norms with health policy and inter-professional relationships within the institution and how these influence midwifery practice. Finally, it shows clearly the effects of all three levels of health care influence on women themselves and their experience of childbirth.

#### **Authors' Note**

Data and other research materials relating to this article can be accessed by contacting the corresponding author.

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