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Organizing for an Epidemic: Cholera in Guatemala

by

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A Dissertation
Submitted to the University at Albany, State University of New York
in Partial Fulfillment of
the Requirements for the Degree of
Doctor of Philosophy

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1995

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Abstract

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Keywords: *Cholera, Epidemics, Organization Theory, Public Health, International Organizations, Social Construction, Health Care Administration, Guatemala.*

After a century of absence, Cholera returned to Latin America in 1991, rapidly spreading to many countries in the sub-continent, including Guatemala. National and International health Agencies undertook massive efforts in an attempt to minimize the effects of the disease. New organizations were devised and existing organizations modified to address the epidemic's challenge.

This study explores the organizational dimensions of cholera as a social issue. It asks how people construct cholera as a social order, how they articulate organizations in realizing that order, and what that articulation says about local, national and international contexts.

The research uses data from ethnographic interviews with bureaucrats in International and National Organizations, and with local service providers in Guatemala. It contrasts interpretations of cholera across contexts, showing the local nature of understandings of the epidemic. Specifically, agents adjust the meaning of the epidemic to the demands of everyday organizational life, forcing definitions upon each other. In the process, cholera becomes "normalized," and powerful agents' definitions prevail.

Unlike this contemporary experience, cholera in the 19th century was catastrophic for Europe and North America. This suggests that the social and institutional context of modernity has developed from an experimental phase to a fully articulated form of life in contemporary society.

The findings show that macro-social referents of individual interactions and micro-social building blocks of large-scale social processes must be brought together to understand a complex phenomenon such as cholera. Further, the forms of contemporary organizational existence are not self-evident, but rather result from active

efforts by powerful agents exercising their interpretations of reality. Finally, the study questions the usefulness of separating the social from the biological, or of treating social categories, such as the health sector, as taken-for granted analytical units, instead of recognizing them as localized social constructs reflecting on the nature of contemporary existence.

We must deepen the organizational study of events such as epidemics starting from their local realization, rather than from pre-existing positive theories, in order to identify contextualized theoretical and practical approaches that better serve the needs of actually existing individuals and communities.

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I.
Problem Statement

Introduction

After an absence of over a hundred years, Latin America was once again visited by Cholera in January 1991. From the moment cholera first appeared in the port of El Chimbote in Peru, the disease spread to most of Latin America with alarming rapidity. Just seven months later, almost three hundred thousand cases had been reported, of which three thousand had died (PAHO, 1991:267).

National health authorities and International Cooperation Agencies quickly undertook massive efforts in disaster relief, provision of oral rehydration salts – the main therapy against cholera – and communications in an attempt to minimize the effects of the disease. New organizations were set up and existing organizations pressed into service to address the multiple practical aspects of dealing with the epidemic (PAHO, 1992; Pestana de Castro & Almeida, 1993). Although the scope of the problem was large, efforts to limit the damage were highly successful, keeping the death toll much below the expected average for cholera (PAHO, 1991:267; *Cf.* Siméant, 1992:212).

Guatemala saw its first case of cholera in July 1991, but the disease only became widespread during the last months of that year (OPS/OMS, 1993). Unfortunately, this country went on to become one of the most hard hit by the epidemic, presenting almost 47,000 sick by November 1993 (Comisión Ministerial, 1993:i). Efforts to address the problem were started from the moment cholera was first reported in Peru, with results that paid off in a very low overall mortality, despite the high attack rate. Specific activities ranged all the way from the more conventional therapeutic and logistic measures to community-based communications efforts (*Cf.* Programa de Promoción Permanente, 1992). National health agencies and International Cooperation Agencies with missions in Guatemala organized these efforts patterned on the experience of the South American countries, most notably Peru. Meanwhile, local

organizations, both public and non-government, performed the multiple and frequently overwhelming tasks of treating cholera patients, seeking out contacts of cases, and disseminating information about the disease, its treatment and its prevention. As time passed, the epidemic became increasingly urban in nature, and as its burden grew, efforts were increasingly limited to curative activities.

Looking at the development of events that have swept over Latin America, and more particularly over Guatemala since cholera first was noted 4 years ago, we perceive a complex picture of actions and interactions of people relating to a common event that they characterize as a cholera epidemic. Specifically, we see agents in international, national and local contexts articulating their behavior in a highly coordinated manner in relation to the epidemic. Moreover, both the stage for, and the result of, these behaviors are bureaucratic organizations.

In this research, therefore, I will be studying cholera in its organizational dimensions. Specifically, I will address the following questions concerning the cholera epidemic in Guatemala as an organizational phenomenon:

– *How do people organize a social order of the nature of an epidemic?* In this question organization implies both the articulation of the "theme" of the event, that which people recognize in common as the "issue" they are addressing, and the articulation of the behaviors they embark upon in addressing the issues. In consequence we may brake this into two secondary questions.

> – *How do people articulate "cholera" as a social order?*
>
> – *How do people articulate organizations as their way of behaving within that social order, and as a way of realizing that same social order?*

– *What does the process of articulation of the event of cholera tell us about the local, national and international contexts in which it happens, and about the relations between these?* In discussing the cholera epidemic in Latin America we see people from a variety of contexts and organizations addressing the problem. In this research I explore specifically how these multiple contexts come together around the epidemic, and what that can tell us about the societies in which it presents itself.

Thus, the study is about the organizational construction of a social issue. The premise here is that cholera is a complex phenomenon. For one thing, it is a material event, namely, the encounter between two biological species – the human and the microbial – with its attending organic consequences. However, it is a social phenomenon. Beside the colonization of human populations by *Vibrio cholerae* there is a colonization of cholera with human meaning. This has both an attributive aspect, whereby people ascribe meaning to cholera as an "external" issue, and a behavioral aspect, in which people interpret and prescribe their behavior – their responses – in relation to that issue. As a result, cholera is considered here as a social construct, that is, as a phenomenon that derives its meaning not simply from a supposed objective facticity, but rather from the interaction of the social and the material that results in the subjective, but shared, experience of people.

Focusing on the contrasting subjective experiences of agents is very important for several reasons. First, as I point out above, epidemics are frequently taken for granted as strictly biological entities that represent the same consequences for all those touched by them. I will show through my research that this is not so, that in fact cholera means simultaneously many things to many people. As a result, a major part of people's activity concerning the cholera is articulating the nature of the event, and transacting with each other over the multiple and frequently conflicting meanings that this involves.

Second, cholera, as a social construct, is built upon the framework of ongoing processes that characterize society in each of the contexts in which it appears as a social phenomenon. By looking at cholera we can learn about these social processes. My research will show how cholera is shaped, and simultaneously shapes, the relations between international, national, and local organizational contexts. Further, I will show that the features of, and specific relationships between, international, national and local organizations, need to be rethought, not as concerning "levels" of complexity or of hierarchy, but as endogenously driven, although definitely interlinked contexts.

Finally, the nature of social processes needs to be situated in relation to the broader socio-historical context of modernity. The micro phenomena of subjective experience need to be explicated in detail if we wish to understand the macro ordering of history and society. At the same time, taking the micro phenomena as isolated

events, driven by their own dynamic, still leaves unanswered the question of why we can find so much "order" in social order.[1] Organizations are one theoretical and empirical domain where it is necessary to consider the macro and the micro scales as intertwined and mutually defined. This research is an example of an analysis that specifically examines this connection.

I will first specify the empirical situation in more detail, and then articulate the theoretical domains that will be brought to bear upon the problem. These theoretical domains will be discussed in greater depth in the literature review.

The Empirical Field

Almost two centuries ago, Western societies faced cholera for the first time. Following an explosive increase in the incidence of cholera in its native Bengal around 1817, the disease spread in successive pandemic waves throughout most of the populated world. The West's experience with cholera left a profound mark on its "collective consciousness." Up to the present, both the healing professions and the organizations relating to public health and health care continue to draw heavily on the memories of cholera when explaining their own development (Cf. Tauxe & Blake, 1992:1390; Pollitzer, 1959:7). Yet cholera has been practically nonexistent in the industrialized world for most of this century.

After an absence from Latin America of over one hundred years, cholera broke out in Peru in January of 1991 (Siméant, 1992:209, Tauxe & Blake, 1992:1388). By October of 1993 the disease had spread to at least 21 countries, affecting a total of over 900,000 people and killing more than 8,000 (WHO/PAHO, 1993:1). Although these are impressive numbers on their own, they represent no more than a very marginal part of the Latin American population. Although untreated cholera will kill over half its victims, since the development of intravenous rehydration therapy in the 1950s

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[1] Law uses the term "social ordering" because "[p]erhaps there is ordering, but there is certainly no order. This is because, as Zygmunt Bauman implies, orders are never complete. Instead, they are more or less precarious and partial accomplishments that may be overturned. They are, in short, better seen as verbs rather than nouns" (Law, 1994 1-2, author's emphases). I will use here the more conventional term, in the understanding that this "order" is never an accomplished fact, but rather an ongoing process of change giving an impression of stability on the short term.

and of oral rehydration therapy in the 1960s and 1970s, cholera has come to pose a very small threat to life if adequately treated (Simeant, 1992:112). Furthermore, in most, if not all the countries affected, common childhood diarrheas kill many more children each year. Yet the issue of cholera has galvanized communities, governments, private organizations, and International Agencies into a series of widespread and costly efforts that in fact ensured a very low overall mortality rate. However, as time has gone by, cholera in Latin America has settled into a relatively endemic pattern, and overt organizational efforts to deal with it have progressively subsided.

How may the chronologically and geographically distinct experiences with cholera of 19th-Century North America and Europe and 20th-Century Latin America reflect upon our understanding of organization theory? Modern health care has emerged as an eminently organizational phenomenon. Increasingly, societies define disease and provide health care in organizational contexts. Although epidemics of infectious diseases have a common, "material" element in them – the encounter between a biological parasite and a host – the way they actually fit into specific social and historical situations is defined by contextual factors inherent to these situations. I will now discuss the theoretical underpinning of such an approach to the problem, and expand on the limitations of existing work in the literature review.

The Theoretical Field

Cholera: Health issues and responses as socially constructed entities

The study of cholera, both through history and in specific contemporary situations, offers powerful insights into the ways in which a disease becomes an issue for social consideration and about how organizations relate to the issue they themselves specify. Through this research I illustrate how cholera became recognized and enacted in the Guatemalan health sector.

Social science has long struggled with the problem of the reification of the social order, that is, the reification of the relatively more stable, yet also dynamically changing, social phenomena that result from the process of structuration (Giddens, 1984). What is the nature of the reality of social order? If there is such a thing as objective social facts, to what degree and in what manner do they impinge upon us?

Epidemics are entities that affect our being both in its psycho-social dimension and in its biological dimension. On the one hand, through the ages diseases such as the plague, syphilis and cholera have wreaked havoc on the bodies of those unfortunate enough to have been infected with the agents of these disease entities. There is no denying the materiality of death and disease. On the other hand, as far as life in society is concerned, infectious diseases consist not only of the encounter between parasitic and host species but, more importantly, of notable actions and interactions. That such diseases have importance for society and for the administration of everyday life in society is scarcely to be disputed in face of the historical record. However, there are more subtle issues to be addressed in discussing the relations between "plagues and people" (McNeill, 1976). What is the nature of disease, especially epidemic disease, as a social entity? What are its implications for society, and more specifically for the aspect of society we call organizations? Traditionally the distinction has been made between the disease, as an issue, and the social response to the disease. The pervasiveness of this approach, particularly in "plague writing" is evident. As I shall attempt to show, the distinction is present in the relatively unthinking, taken-for-granted world of everyday relations in and about organizations: epidemics are "enemies," which people and organizations engage with, usually in the form of war, devising and implementing "responses" to the threat posed.

However, the separation of epidemic and response has also filled most of the space of technical literature on the subject. As the following three quotations show, authors writing either in the medical or the historical tradition are accustomed to representing disease, cholera included, as an "actor" with an existence beyond its relation with human populations (*Cf.* Delaporte, 1986:6-8).

> ***"When trying to deal in a summary manner with the geographical distribution of cholera throughout the world, it is far easier to refer to the few areas unaffected by this scourge than to enumerate the many countries where the presence of the disease has been recorded. Generally speaking, it may be maintained that the infection has not penetrated into the northernmost and southernmost parts of the globe. (...)" (Pollitzer, 1959: 45-46)***

• • •

> ***"The cholera pandemics were transitory phenomena, destined to occupy the world stage for only a short time – the period during which public health and medical science were catching up with urbanization and the transportation revolution. Indeed, cholera was to play a key role in its own banishment from the Western world; the cholera***

epidemics of the nineteenth century provided much of the impetus needed to overcome centuries of governmental inertia and indifference in regard to problems of public health." (Rosenberg, 1962:2)

• • •

"Most historians who have dealt with cholera have been drawn to the subject because they have seen in the impact of the disease 'a test of social cohesion', as R. J. Morris has put it; (...). Nor has this perception been confined to historians of the British experience. Roderick McGrew, author of a fine study of the impact of cholera in Russia, also noted that 'cholera scored the European social consciousness, exacerbated contemporary tensions, intensified the impact of current social problems'. Yet there have been dissenting voices too. Margaret Pelling, for example, in a study of nineteenth-century theories of cholera and fever in Britain, has suggested that the impact of cholera was far less significant than that of tuberculosis or the fevers, and concluded that cholera had almost no effect on political, administrative or medical history. Similarly, Charles Rosenberg noted that cholera had no permanent effect on political and administrative structures. Sufficient work has now been done in the area, however, to attempt to bring this conflict of opinion at least to a provisional resolution." (Evans, 1993:126-127)

While the common-language usage of the imagery of "disease" versus "response" could easily be dismissed as part of the strategies we resort to in making sense of our everyday environment, sustaining the distinction within the discourse of social science must be explicitly justified. Such justification has never been forthcoming. Indeed, the usage of this distinction, which is present in most of the historiographic literature reviewed, must now be reexamined critically, with a view, not only to understanding the nature and relations of the categories of "issue" and "response," but also to penetrate beyond them into the social processes they either make evident or hide.

Through my research I attempt to illustrate first, how the constitution of a health issue is inextricably linked to the features of specific social contexts in which the issue is raised, and in consequence, tied to the nature of the "response" given, not simply by some necessary technical logic that dictates practices in response to stimuli, but rather by the common root, within a given social context, of both the issue as specified and the response as structured.

Specifically, there are two interrelated items of social constructionism that may be brought to bear on the interpretation of this problem. The first has to do with the definition of the situation. How do people decide what is "going on?" As McHugh pointed out, the definition of situations implies not only a "why" to behavior, but

especially a "how" (1968:17). This is a necessary preliminary step in making sense of my research problem. Before I can venture to say that cholera as a health issue "means," "represents," "causes," "is due to..." or whatever other causal phrase I might use, I must first address the question of how cholera *is*; how does cholera – the social of it – "go on." In other words, there can be no understanding without description. This refers to the description of cholera within the context of this research.

The second item of sociological knowledge concerns enactment theory. This is an effort to address the why of behavior, in that it seeks an explanation of the relation between people and environments. Essentially, it posits that *"...people enact the environments which constrain them"* (Weick, 1988:305). The theory of enactment has been judged especially relevant in understanding crises, in that it is peoples' understanding of the problem they are facing, and their consequent behavior, that define the very nature of the problem itself. Concerning this position I will ask myself, on the empirical plane, how do people "enact" cholera. On the theoretical plane, I will ask how far back before the "crisis," and how far forward into its future is enactment a relevant notion. I attempt here an expansion of the theory to understand crises, not as events that can be isolated, but as embedded parts of an overall "implicate order" (Morgan, 1986:233-234).

However, the development of these two themes is not enough. After all, the definition of the situation and enactment have been the repeated focus of research efforts before this. The key to the significance of these two theoretical resources for my research lies in their application across contexts. I am exploring in this work how the definition of a situation and the enactment of a specific event are carried on simultaneously in three partially overlapping and mutually influencing contexts, based on differing histories and assumptions.

Organizations as a key figure of modernity

In the interpretation of the data I have generated and present, I will resort to concepts and theories constructed around the notion of modernity. The reason for this is as follows. I have stated above that health issues and responses are tied to specific social contexts. This being so, I must contextualize my problem of study with respect to the features of the world in which it is present, to wit, a Third World country in the late

20th century. An increasing body of literature examines the nature of the socio-historical context which this chronological period overlaps, and has come to typify the ongoing chain of events, starting in the 17th century and within the broad limits of Western Europe, as "modernity." The term refers to a somewhat organized "project"[2] characterized, among other things, by the pursuit of an absolute, rational, abstract and linear logic, the establishment and deepening of differentiation along a variety of dimensions (e.g., theory/practice, mind/body, object/environments, objective/subjective, state/society) and the constitution of the nation-state and its mechanisms of surveillance (Giddens, 1990; Toulmin, 1990; Foucault, 1980) We live yet in the consequences of this chain of events.

Certainly my intention is to generate an empirically grounded and internally consistent theoretical account of the phenomena I am exploring. However, part of the effort must include the contextualization of the phenomena. Describing the actions and interactions involved in articulating cholera is important. Yet, as Strauss and Corbin point out, *"...phenomena and their related action/interaction are embedded in sets of conditions."* (1990:159) The implications of this are twofold. First, describing phenomena without discussing their conditions is superficial. Second, stating the conditions without tracing the actual paths that lead from them to actions might be deemed irresponsible (*Cf.* Strauss & Corbin, 1990:166-168). As I do not wish to fall into either of these categories, I attempt, based on the literature, to typify the context of my research problem. Through the tracing of these "conditional paths" I am both exploring the relevance of the notion of modernity as it concerns the articulation of an epidemic as a social event and the interorganizational relations undergirding that articulation (Brandt, 1991:202-203). Seen from an alternative perspective I will be exploring the significance of one specific event – cholera – as a phenomenon of modernity. More specifically I will discuss the bridge between the macro domain of modernity, and the micro domain of the research problem that is established through organizations; organizations are understood here as a specific product and focus of modernity, wherein the problematic situation – the epidemic – is realized.

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[2]"Project" is used here, not in the sense of a pre-defined plot guiding history, but rather to point out that as socio-economic and political relations are established they constitute a structural logic that tends to define the limits of further action

The incorporation of center and periphery

One of the key dimensions of modernity has been the dynamic of the relations between "centers" and "peripheries." This dichotomy has generated a large amount of theory concerning the relations both between and within nation-states. The prevailing language of this theoretical debate has been that of the economics and policy of development (*Cf.* Hettne, 1990; Cardoso & Faleto, 1979). Some authors have pointed to the need for a greater effort at integration between the ideas of organizational theory and international studies (Jönnson, 1993). This constitutes an important field of exploration. Organizations are one of the ways in which context-action determinations are realized. This harks back to Strauss and Corbin's suggestion, stated above, that it is not enough to enunciate conditions of action, but rather that these must be traced to each other in specific ways. The linkages between the institutions and the polities of modernity at the "core" and at the "periphery" need to be characterized in their actual operation through the study of organizations in interaction (*Cf.* Finnemore, 1993).

Two Caveats: Assumptions of the study

I must address two issues before any further elaboration is made. The first of these concerns the breadth of subjects touched upon in the research, the second deals with researcher preconceptions. The theoretical topics upon which this dissertation touches are multiple and varied. Indeed, they range from micro-theories concerning individual action and interaction, to sweeping explanations of the course of events over centuries and across continents. This approach, which obviously affects the depth of research in any one theoretical vein is not only legitimate, but indeed necessary in the context of a research such as this. Any social order presents a high degree of complexity, both in its historical dimension, and in the nature of the processes that link the various organizational contexts within it to each other. It stands to reason that a useful account of such complexity must both attempt to shed light upon the multifaceted complexity of the subject and at the same time identify the organizing threads that may run through that very complexity. There is little space for a deductively imposed parsimony within a qualitative, constructivist approach to social science. Depth here is measured by the degree of overall understanding that an account gives of the phenomenon, rather than in terms of how theoretically abstruse that account may be.

Concerning theoretical preconceptions, I am not going to attempt to sustain the pretense that I have come to the study of the phenomena by stripping myself of theoretical and empirical commitments. Furthermore, the phenomena themselves are not empirical absolutes but rather empirical referents of theoretical preconceptions. If I studied organizations in the health sector at the local, national and international level as they concerned cholera in Guatemala, it was to a good degree because I had, given my professional background, experience and training, consciously or unwittingly accepted that such categories – "health sector," "nation," "the international level," "locality" – were relevant as social phenomena. However, these were not inevitable dimensions of variation existing "out there" and forcing themselves upon me. Indeed, as I will show, they were categories with a much more elusive nature than might first be expected, with a reality that is but the fleeting product of my ongoing belief in their efficacy. As soon as I started using them as analytical categories of research I experienced the limitations that drove me to emphasize their subjective nature, recognizing them as the instruments of everyday sensemaking that they are. In their place I resort to an account of the events under study that starts from the notion that, as far as personal experience is concerned, there is only one level of reality: that of local immediacy. The experience of people at a variety of what we conventionally call "levels" (e.g., "the international," "the national" or "the local") are equally localized as concerns the agents themselves. This means that the variety of agents and organizational contexts studied differ from each other more in the contents of their actions and interactions than in the form of the same.

Organization of the Text

Chapter II of the dissertation is a literature review. In it I develop the three aspects presented above: Theories of modernity, the interpretation of relations between centers and peripheries, and social constructionism as relevant to the development of cholera in contrasting environments. I show what the main contributions of the literature may be to the interpretation of the phenomenon, as well as the main limitations which this research may address. Chapter III discusses the methods through which the research was done. It covers both the description of these methods, and an explanation of the rationale, both pragmatic and theoretical, that lies behind their choice.

Chapters IV, V and VI discuss the strategies through which people interpreted and articulated their understanding of the cholera event and what this meant for their behavior. Chapter VII reviews some aspects of the history of cholera in 19th-century Europe and North-America, tracing six trends with implications for the development of organizations as phenomena of modernity. Against this background, chapter VIII addresses specifically the linking of centers and peripheries, as it occurs through the cholera event, as a characteristic phenomenon of modernity. Finally, chapter IX brings together the insights derived from the data, explores their implications for further research, and discusses the limitations of the study.

II.
Literature Review

Introduction

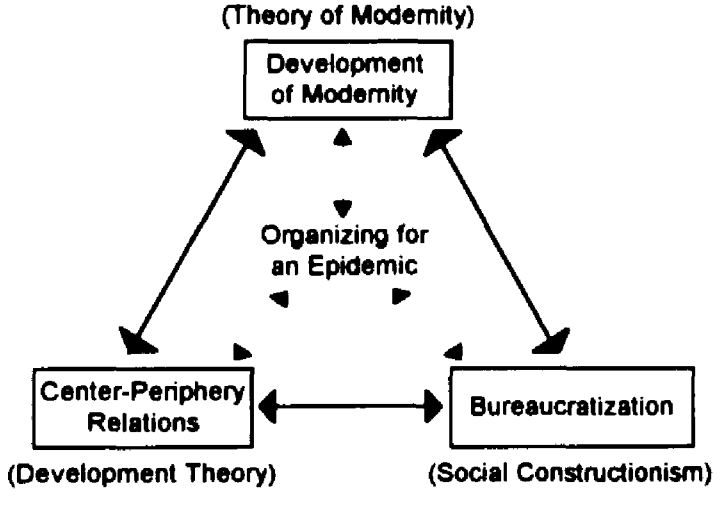
As stated previously, the purpose of this research is to study the organizational construction of a cholera epidemic, that is, what the relation is between organizations and human understanding of cholera. In this chapter I will discuss three areas of the literature that come to bear upon organizing for an epidemic. First, I will set the stage by considering some relevant issues from the ongoing macro-sociological and historical discussion about the development of modernity. Dealing with cholera in contemporary Latin America is very obviously an organizational process. Here I will look at the organization as part of a context, namely, as an eminently modern product that owes its expanding use in the last 150 years or so to trends and conditions that are peculiar to the social context and the historical period we call modernity.

Following this, I will address the relations between central and peripheral societies in the modern world system. Tentatively accepting a world-systems view of the economic and political dynamics of modernity we may situate Guatemala at the periphery of such a world system. Here I will explore the organizational implications of the articulations between center and periphery in such a modern world system, suggesting that organizations mediate many of its relations. This should have implications for cholera as a phenomenon that involves global dynamics stretching far beyond the limits of the nation-state. Finally, I will discuss the organizational literature concerning the social construction of reality. Specifically, I will consider how agents actively specify and negotiate the nature of social reality, with application to the cholera epidemic.

The significance of these three bodies of literature for the present research lies not so much in their respective internal debates, as in the way they come together in the explanation of a whole issue. Each of the research traditions discussed offers insights on social phenomena from a specific perspective. They all recognize the

existence of bridges between their immediate subject and other theoretical accounts, but tend to assume these linkages rather than make them explicit. What I intend here is to juxtapose the discussion of individual interactive phenomena, such as are dealt with by social construction theory, with analyses of patterns that occur across social and historical contexts that constitute the object of theories of modernity and of development. In this sense, the gaps I am looking for in the literature are not so much *within* each field (which doesn't mean that there isn't such a debate, but rather that it is not this debate that I am interested in), as *between* the fields. In other words, the questions I am asking of the literature, and finding unanswered, are questions that concern neither "big picture" nor "small picture" issues. Rather, they concern "whole picture" issues. Understanding the cholera experience in Guatemala in its own terms requires asking what social constructionism can tell us about the development of modernity, and conversely, what development theories can show us about the micro-operation of organizations. Posing such apparently incommensurate questions puts the theories in a position of "weakness" that strips them of some of their normative authority. This allows for the articulation of an account that focuses upon the features of the whole empirical object – cholera in Guatemala – rather than upon the autonomous and abstract tenets of the theories.

In the context of this discussion the literature review pursues two objectives. The first is to lay a general framework of reference from which the empirically grounded theory may draw as a source of insight and concepts. The second is to identify the gaps between the extant bodies of literature to which the results of the research may speak.



As a way to make the argument of this chapter clearer I present this "graphical index." In the figure, each box represents a category of phenomena, the relevant bodies of theory being placed

in parentheses next to it. However, the central phenomenon of this study is the organization of the epidemic. Assuming that this is a complex and multi-determinate event, we must understand the categories of phenomena as aspects of the event, and the various bodies of theory as perspectives that can be brought to bear upon it, and upon the mutual determinants that exist between each of the categories. In this chapter we will circle the outside set of categories and relations, following the path traced by the solid-line arrows. In chapters 4 to 8 I will expand upon the relations traced by the dotted-line arrows. Finally, in chapter 9 I will focus the elements of the argument upon the central issue of the organization of the epidemic as a whole.

The Development of Modernity

Recent debates around the notion of postmodernity have through contrast helped to make us increasingly conscious of the taken-for-granted peculiarities of the world in which we have lived for the last three centuries (Habermas, 1992; Bauman, 1992; Giddens, 1990; Parker, 1992). Bureaucratic organizations, as eminently modern products, are also the main way in which contemporary societies deals with an issue like cholera. In this section I will review some aspects of this socio-historical period we call modernity as the stage within which organizations developed as social solutions to the question of epidemic disease in the 19th and 20th century.

Surveillance and control: The bridge between the institutions of modernity and the role of the health sector

The major processes of modernity, namely, industrial production and market distribution in a large scale and scope (Perrow, 1991; Chandler, 1993), unity and centralization based on a state system (Wallerstein, 1983; Hall, 1985) and the cultivation of a philosophy of certainty and rationality (Toulmin, 1990; Quijano & Wallerstein, 1992), all induce, and at the same time are maintained by, sets of institutions, more specifically of organizations (Giddens, 1990). The organizational history of modernity concerns the spread of such institutional solutions across an ever broader part of the social spectrum. More specifically, organizational bureaucracy has served as a means to ensure the efficient, unobtrusive, acceptable and legitimate alignment of *"more-or-less unwilling employees"* in the pursuit of the employer's ends

(Perrow, 1991:728-729, 736). In this expansion of bureaucracy, the health sector has been no exception.

I have stated above that contemporary cholera is an organizational event. A primary empirical basis for this statement lies in the fact that large numbers of people are mobilized in a relatively coherent fashion around the issue of cholera. In searching for explanations about how this can be we need to draw on two notions that form the immediate context for the relation between health and disease (represented as cholera) and modernity (represented as organizations). The first is social control, that is, how societies ensure the compliance of their members. The second is surveillance, understood as the concentration of information and supervision of subjects that makes control possible (Giddens, 1990:58).

Social control is not simply the coercive determination of the behavior of others through force, but also the shaping of self-regulatory systems of groups. Both structural conditions and the outright exercise of violence push social agents in specific directions and limit the range of options open to them. However, in addition to relatively straightforward means of coercion there are more subtle self-regulatory systems operating in the "accommodation" or "negotiation" of the limits between groups, their ideas or their interests (Mayer, 1983:24). Foucault presents the concept of "*savoir*" – a power-induced notion held in society about "what may be done" – as a diffuse feature of society accounting for the agency of control. Uncomfortable with the impersonal and vague nature of this idea, Ignatieff sustains that the *practice* of control is a compromise outcome of negotiation (in a broad sense), not only between conflicting groups, but also between incompatible interests within the same group (1983:93; 95). Mayer calls this "associative social control," characterizing it as a context of control entered into more or less willingly by its subjects (Mayer, 1983:28). In a way, both positions are right, because it is the practice of control that becomes institutionalized in people's minds as a knowledge about what behaviors are admissible, and thereafter drives their compliance without need for outright coercion.

However, that practice is not to be explained through uni-causal models that see social control as a functional reaction to single events (e.g., the "class fear" of the rich from the poor under conditions of a crisis such as an epidemic) or as evidence of single processes (e.g., the "labeling" of cases as suggested by deviance literature) (Ignatieff,

1983: 89, 92). Rather, it is an interactive practice in which existing institutions are the *de facto* entities that survive *"...because no alternative can be found or because conflict over alternatives is too great to be mediated into compromise"* (Ignatieff, 1983:96).

Against this background we can begin to think about organizations in the contexts studied as the space where the compliance of large numbers of people concerned with cholera across vast stretches of time and geography is assured, in fact articulating their individual agency with the large-scale processes of the development of modernity and the expansion of the capitalist world system.

However, the modern organizations of the health sector are not just an "arena" in which the bridge between large-scale processes and small-scale action become realized. As societies became increasingly massive, organizations came to the fore as the actual instruments of this relation in each specific field of action. If social control constitutes the "output" side of an equation of action, surveillance is the "input." Dandeker defines surveillance as *"...the gathering of information about and the supervision of subject populations in organizations"* (1990:vii). He isolates three interrelated phenomena in it. The first is the *collection* of information, the second is the *supervision* of subjects, and the third is the *application* of collected information to supervision (Dandeker, 1990:37) It is easy to find expressions of these elements in the constitution of the modern health sector, which gathers records of disease, both individual and societal, watches over individuals and communities (through clinical and epidemiological surveillance), and supervises behaviors in the form of sanitary regulations and clinical follow-up. None of these are processes carried out by individual intent. Indeed, one of the problems of surveillance in pre-modern societies was the difficulties implied in constructing it as a private initiative of the sovereign (Dandeker, 1990:54). Rather, the collection of information and the supervision of subjects are purposes that can only be served adequately by organizational bureaucracies. As social units expanded in size and complexity such bureaucratic instruments became more of a necessity, as the mushrooming health care industry and policy fields attest.

Therefore, the coherent articulation of behaviors around cholera requires looking at the surveillance function of health sector organizations as the bridge between the specific case of the epidemic, and the larger socio-historical context within which surveillance becomes such a preeminent function in itself. In exploring this

function we must not oversimplify the relation between organizations and surveillance, assuming that organizations are simply instruments of class interest, functional responses to the technical exigencies of health and disease, or neutral arenas for the negotiation of conflicting polities (*Cf.* Dandeker, 1990: 3-4). Rather than isolating any of these uni-directional causal explanations, we should think of surveillance as a function, and bureaucracies as forms, both evolving in the presence and under the needs of the other. Giddens calls the resulting social orders "power containers," that is, "circumscribed areas for the generation of administrative power" (*quoted in* Dandeker, 1990:32).[1]

Organizations realize modernity

When we review the means that Giddens suggest lead to the configuration of power containers we recognize the relevance of the discussion to the problem of organizations vis-à-vis cholera. First, organizations offer the segmented spaces that make detailed and permanent surveillance possible (Giddens, 1990). The structures of the health sector, whether clinical, epidemiological or administrative open up a large segment of private life to surveillance. Second, the specialization of officials and experts allowed by the monetary economy makes available a force of "surveillers." Again, the development of the health professions, notably medicine, provide us with an empirical referent for this condition. Third, the availability of sanctions, although in Giddens' usage referred most immediately to military and police violence, is also a practicable option in health. By controlling strictly the means of diagnostics and therapeutics, the governmental regulatory apparatus and the medical profession may exercise their discretion upon their subjects' behavior. Finally, Giddens points to the development by ruling authorities of symbol systems that hold sway over subjects. Again, the medical ideology, with its inexorable logic of causes, consequences and interventions has also expanded within and beyond the limits of the health care sector (Dandeker, 1990:32-33).

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[1]Again we must keep in mind that the social order is a process, not a static product, a fact underlined here by the notion of "generation," itself suggesting a process.

A further, significant aspect concerns surveillance in the productive firm as the symbiotic counterpart of surveillance within the state's administrative apparatus. Through the gathering of information and supervision, the modern state set the context of dependability needed for the development of industrial production. At the same time, the expanded productivity of industry, ensured through surveillance at the level of the firm, made available to the state the surplus resources that allowed the surveillance activities of the state (Dandeker, 1990:12). This symbiosis becomes crucial if we seek to understand the shortcomings in any given state apparatus. The weakness of the typical Latin American state makes little sense if we interpret it as an independent phenomenon, rather than as an integral element within the constellation of processes, both national and supra-national, that define the nature of a given society.

The trend toward bureaucratic surveillance is further evident in the "managerialization" that Chandler refers to as the substitution of the invisible hand of the market by the "visible hand" of management. Again, it is a phenomenon that spreads through the temporo-spatial framework of modernity, first covering transportation and communications after 1850 (Presthus, 1962:62), and then industry at the beginning of the 20th century (Chandler, 1993). Perrow takes the organizational side of the argument further, suggesting that *"...the appearance of large organizations (...) makes [these] the key phenomenon of our time, and thus politics, social class, economics, technology, religion, the family, and even social psychology take on the character of dependent variables."* (1991:725) He argues that, in addition to an important increase in the prevalence of wage dependency and the externalization of the social costs of industrial production, the rise in the industrialized nations of the present-day "society of organizations" is the product of the widespread application of "factory bureaucracy" (1991:728-729, 736).

As the negative social and environmental impact of larger and more numerous self-interested industrial organizations increased, the need for countervailing non-economic organizations to address these problems also increased. Such non-economic organizations became *"(...) the infrastructure of the new system, not only picking up the pieces, but moderating conflict, developing the resources, and shaping the culture in ways consistent with a society of organizations, including providing the cognitive categories, or ways of thinking that legitimate it."* (Perrow, 1991:749) The story of

cholera in the 19th century, with its association to the phenomena of urban life in the midst of the industrial revolution, becomes a prime testing ground for the notion that modern economic organizations rose to primacy, not because of any inherent efficiency (*cf.* Williamson, 1985), but rather based on savings industrial organizations derived from imposing externalities on the societies surrounding them (Perrow, 1991:733)

Furthermore, the governmental and voluntary organizations that were set up to deal with the issue of cholera are precisely the kind of organization Perrow refers to as *"the 'ball bearings' that reduce frictions of huge organizations working and colliding with one another."* (1991:751) The boards of health, public hospitals and sanitary institutions at the national level, and the sanitary conferences and their attending organizations at the international level (Pollitzer, 1959:967ss.) were either explicitly or implicitly dealing with problems that increasingly arose as consequences of the formation of large industrial production centers, and of the massive trade among these.

Modernity and health

The final argument in this section concerns the relation between health and history. Health and disease are considered here as parts of a process that develops organically embedded in, and parallel to, the changes in the specific social contexts in which it is considered. As Goudsblom points out, *"...in gauging the responses to disease in the past we have to guard against anachronisms. We may all too easily attribute reasons, based on modern scientific insight into the mechanisms of contagion and infection, to people who could not possibly have this knowledge."* (1986:165). Furthermore, the study of disease as an integral element of society in any given moment tells us about more than simply its pathological mechanisms. Rather, it refers us to the causal frameworks operating in a given context, and to the social, economic, political and cultural dynamics constituting any given society (Brandt, 1991:202-203).

As a result, as the broader social context varies, so the accounts of disease are modified too. As the scientific approach to nature grew in usage simultaneously with the changes in urbanization and communications that characterized the 17th and 18th centuries in Europe, disease became increasingly interpreted as an independent object of analysis and action, rather than as one more element in a constellation of factors constituting "unwholesomeness." (Goudsblom, 1986:175; *Cf.* Toulmin, 1990:67-69) As

a result, disease was to be approached as an analytically autonomous entity, to be addressed through testable propositions, in terms that broke away from the undemonstrable.

Further, the interpretation of disease became associated with a perspective that viewed "engineered" human intervention in nature and society as both necessary and possible. Disease was no longer considered a phenomenon that reflected upon the intangibles of spirit or affect, nor as the platonic realization of a taxonomic category of nosography in a specific organism, but rather as an actual dysfunction in the organic body. Coupled to this was a new approach to medical intervention. If the essence of disease resided in the body, then medicine was to be concerned with the manipulation of the body as a feasible enterprise. This would serve to justify, not only the practice of a new, clinical medicine, but also of a social medicine based on the authority of expertise (Foucault, 1975). It was against this setting that cholera first presented itself in the West at the beginning of the 19th century. As a result, it became a prime object of intervention for the redefined role of medicine and health care.

A Locus of Modernity: Linking the center with the periphery

In this section I will discuss one locus in which the organizational expressions of modernity through cholera may be found, namely, in the relation between centers and peripheries in the modern world system. The theories of modernity discussed up to this point are mostly explanatory, that is, they intend to describe and account for modernity as a phenomenon. However, concerning the nature of the relations between actual societies with respect to modernity there is a considerable body of theory that addresses modernity in its normative dimensions.[2] This is the theory of development which, particularly since World War II, has attempted to account for the changes evinced by societies, explain the important differences that such changes show, and prescribe ways in which the perceived benefits that some societies have derived from these changes may be generalized to others.

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[2]Incidentally, this is wholly concordant with the spirit of modernity. You no longer *expect* reality, you go out and engineer it, you prescribe it.

Initial accounts of development were themselves un-self conscious projections of the modern agenda, representing development as a single path along which nations progressed from tradition (or backwardness) to modernity (*Cf.* Rostow, 1960). Such interpretations harked back to the ideas of both the Marxist and the Liberal grand-narratives that saw history as linear progress (Hettne, 1990:39-40). So powerful were these images, that *"it is probably correct to say that the general outlook of modernization theory still constitutes the popular image of developing countries."* (Hettne, 1990:72) Indeed, we might say that the vast majority of both the thought and practice of policy making and policy implementation concerning the Third World leans, at least implicitly, toward this interpretation (Escobar, 1995).

However, both theoretically and practically that optimistic interpretation of development has run into considerable trouble. On the one hand, the expected benefits of following the path of the industrialized nations did not materialize for most of their Third-World peers. Furthermore theorists, especially those in Third World settings, began suggesting that rich and poor countries are not autonomous elements to be understood as placed upon a continuum of development. Rather, they function as terms in an equation where the benefit of one can only come about at the expense of the other. Such positions suggested at first a relatively straightforward exploitative relation between centers and peripheries (Prebish, 1950, Frank, 1966). Later, more sophisticated proposals explored the articulations between elites outside and inside underdeveloped countries, which sustain the dependence of these countries in spite of a possible measure of economic growth (Cardoso & Faletto, 1979). Against the "endogenetic" explanations of modernization theorists that attributed change to processes inside the nation-state, dependency theorists found motives for the conditions of development (or rather, of underdevelopment) in exogenous forces (Hettne, 1990:5).

Going beyond this endogenous/exogenous distinction, which presupposes the self-evident and unproblematic nature of the nation-state as a valid unit of analysis, World-Systems theorists have suggested that development should be understood as part of a large-scale, long-term process involving more than unitary nation-states (Hettne, 1990:122-126). This account of development interprets capitalism as a world economy constantly expanding from its original 16th-century European seat. The

system not only sustains the center-periphery relation by marginalizing and eventually engulfing other less dynamic economic systems, but does so independently from political hegemony, which cycles through a variety of centers (e.g., the Dutch, Spanish, British, and U.S. empires) (Wallerstein, 1983), given the existence of an upwardly mobile "semi-periphery" (Hettne, 1990:123).

Whatever the theory of development espoused, health and disease remain as indicative of development. For the modernization theorists, they are a measure of the position on the path from backwardness to modernity. From the perspective of the dependency theories, health and disease evince relations of exploitation and expoliation. Finally, from a world-systems perspective patterns of health and disease reflect patterns of regional and global interaction.

Additionally, from the multiple competing accounts of development we may extract several significant issues for our study of cholera. First, the importance of the dynamics of change in social settings cannot be overlooked in attempting a contextualized account of the various cholera experiences, whether such change is conducive to "development" or not. We cannot assume that cholera relates to human society in a constant way through time, even if it involves the same two organic species. Second, we must consider the interaction between local and global dynamics, whether we are willing or not to give the nation-state an analytical priority (*Cf.* Held, 1991). This means going beyond the coincidences suggested by dependency theory between accumulation and power in one place and depauperization and weakness in another, to the specification of *how* such coincidences are sustained in specific circumstances, of which the organization for cholera is one. Finally, given temporal and spatial specificities, we cannot apply normative models indiscriminately across contexts (Cardoso & Faletto, 1979:172). Rather, comparison should serve to contrast and differentiate, not simply to measure phenomena by supposedly objective standards. In comparing early 19th-Century Europe with late 20th-Century Latin America, as in comparing organizations in the context of a Washington-based international milieu with organizations in national or local settings, we should not assume that they are informed by a single model, but rather allow the features of an unfamiliar context to help us make the taken-for-grantedness of a familiar context more problematically visible.

Specifically, it is in organizations and interorganizational relations that we will locate the processes of change, global-local interaction and local specificity. Jönnson has argued in favor of greater communication between the bodies of organization theory and the study of international organization. On the one hand, organization theory rarely considers international organizational phenomena as distinct objects of study. On the other, international studies focus on "structural" theories such as game and regime theory, without considering the practical aspect of how the cooperation, negotiation or conflict between states in the international arena are actually realized (1993:463-464; *Cf.* 1986). Furthermore, he notes, organizations as a phenomenon have proliferated as much in the international scene as they have within the context of the nation-state. Both intergovernmental organizations (IGOs) such as those of the United Nations system and international non-government organizations (NGOs) have increased in number and scope of activities since the Second World War (Jönnson, 1993:464). Additionally, dyadic relations between states are also mediated by organizations, whether these be formally intergovernmental organizations or national agencies addressing issues of foreign policy.

International organizations mediate relations within networks of organizations that span several national contexts, acting as "link-pins." In this role they exercise a power derived, not from formal authority, but rather from their capacity to structure the network and its rules (Jönnson, 1993:466). In this capacity they influence national processes through two channels, one indirect and the other direct.

On the one hand, the typically high turnover of international bureaucrats both feeds into, and is fed by, national bureaucracies. As a result, a community of interpretations builds up within a network of individuals comprising influential levels of the national bureaucracy and the international organizations. Such communities of interpretation may constitute what have been termed "epistemic communities" built upon technical expertise and authoritative claims to policy making in specific domains (Haas, 1992:3). The implications of such epistemic communities go beyond the obvious informal effects that they may have upon policy making (Jönnson, 1993:470-471), in that they reflect the trend toward opening up ever increasing domains in society to the discretion of the professions and to the application of expert knowledge (Haas, 1992:7-12; Giddens, 1990:27, 83ss). Further, they illustrate the interpenetration of government

and experts in policy making. The organizational dimension is especially relevant in this context, as it is organizations, both national and international, that serve as the framework of practice in which such interpenetration happens.[3] (Haas, 1992:26-29)

On the other hand, international organizations directly influence policy formation and implementation at the national level. In one example, UNESCO[4] actively promoted the formation of national science policy bureaucracies, "teaching" the national governments the "importance" of such agencies, and simultaneously blocking alternative national proposals, both through practice and through rhetoric (Finnemore, 1993). In her research, this author shows how certain policy initiatives occurring within the confines of the state, particularly in the case of weaker countries, are less related to objective "demands" within the state than to interests derived from outside the state and articulated by international organizations.

In this respect, specifically applying an organizational perspective helps to clarify how International Agencies mediate the adoption of solutions that derive their legitimacy from institutional processes rather than from any "essential rationality." Finnemore distinguishes this from the "mimetic isomorphism" of neo-institutionalism (*Cf.* Powell & DiMaggio, 1991) in that it is a process mediated by the international organizations, rather than a direct imitation of dominant forms by newcomers (Finnemore, 1993:592). However, the phenomenon described could be interpreted as making explicit the mechanisms of isomorphism, in which the International Agency plays a key role as an organizer of the channels through which information needed for mimesis may flow (Powell & DiMaggio, 1991:64-65).

In this research the relations between local and national organizations and international organizations are an important empirical subject. I will be discussing the role of these international organizations in articulating national and supra-national systems of thought and practice as they concern cholera. More specifically, this research focuses the tools of organizational theory upon international organizations in

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[3]This does not mean that organizations are some kind of objective vessel in which people operate. Rather, they are both the product and the condition for the articulation of the epistemic community and the worldview that sustains it.

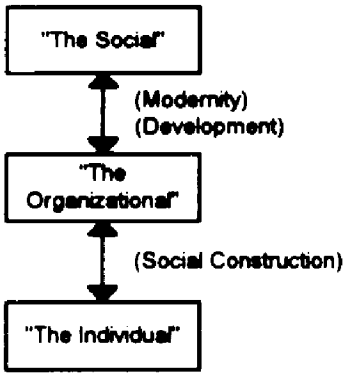
[4]The United Nations Educational, Scientific and Cultural Organization.

their relation to national and local organizations. It also explores the nature of the epistemic communities within which notions about cholera flow between international and national contexts, and what these flows tell us about the dynamics of expert authority and legitimacy. Finally, it considers the "form" of organizations used to deal with cholera, which makes notions of institutional isomorphism very relevant.

In sum, it might be useful to think of the organizations explored in this research as fitting into a set of development contexts, some nesting and others overlapping, set along both the temporal and the spatial dimensions. First, the agencies studied might illustrate the overlap between expert systems and formal organizations. Furthermore, they should inform us about the articulation of organizations through individuals and through policy issues, both within and beyond the national context. Additionally, the dynamics of the relations illustrated shed light upon the question of the national state as a useful unit of analysis. Finally, they underscore the complex nature of interorganizational relations once it is recognized that these are socially constructed through a process in which multiple agents at various levels both shape each others' interpretations and manipulate the elements of understanding they are offered by others.

Social Construction and Organizations

In the previous two sections I have discussed how organizations mediate and realize the processes involved in the socio-historical development of modernity and in the relation between central and peripheral societies. In the study of the organizationally mediated relation between "people" and "societies," I have been exploring the part of this relation that goes between society and the organization. In this third section I will address the second half of the relation, that which travels between organizations and individuals.



Epidemics may be characterized as massive social phenomena, in which people shape their behavior according to overall, recognizable patterns. However, these patterns of social order cannot be adequately explained simply by interpreting them as rational response of

individuals or groups of individuals to objective external conditions (*Cf.* Giddens, 1984:xv-xvi), as if the agent of a disease impinged in an immediate and undifferentiated manner upon behavior. Certainly, *"(...) Society does (...) posses objective facticity. [However] society is (...) built up by activity that expresses subjective meaning. (...) How is it possible that subjective meanings become objective facticities?"* (Berger & Luckmann, 1966:18) The epidemic, despite its large-scale nature, is built upon personal, subjective experience. In attempting to understand how this subjective meaning becomes the objective facticity that informs social structure, I will draw upon a series of constructs that scientists in the social constructionist tradition have advanced, and which help us to link meaning systems and behaviors of agents as components of social reality.

The social construction of the epidemic

We constantly engage in specifying to ourselves and to others what social life is about. Whether implicitly or explicitly, we bracket portions of experience to make them available as issues to address. This process becomes especially evident when people face a situation for the first time. Cholera in both of the temporal contexts in which I will discuss it in this research is a "new" phenomenon. On the one hand, it was only in the 19th century that cholera first went beyond the limits of southern Asia into Europe and the Western Hemisphere. On the other hand, cholera has returned to Latin America in the last four years after an absence of almost a century. Thus, in both cases we can think about these societies' "encounter" with cholera as "new" situations.

Agents specify such situations by incorporating chains of actually occurring events into a social order. When subjects encounter cholera, they attempt to make it relevant to their overall experience, and at the same time to bring this previous experience to bear in interpreting the epidemic. This implies disengaging the phenomenon from its immediate chronological referents, constantly reinterpreting the meaning of events, past, present and future, so as to weave them all into an ongoing narrative (McHugh, 1968:26). In looking at cholera we must think of it not just in its own terms, but rather as it serves subjects to explain past events, or as they attribute these past events with a causal relationship to the epidemic. At the same time, however, if we assume that agents engage in this ongoing recontextualization of events, we must also be prepared to explain how agents can interact despite having differing subjective

interpretations of an event. McHugh suggests that what happens is that most agents are willing, most of the time, to agree tacitly with others about the nature of their shared experiences (1968:30-31). This author finds that events are more likely to be incorporated into an ongoing narrative in contexts of order, while in contexts of disorder agents will tend to reinterpret their past experience so that the novel event will fit into it. The net result is that agents make context and event contingent on each other (McHugh, 1968:136).

Facing an event such as cholera, with an obvious "natural history," I would suggest that in fact agents engage simultaneously in contextualization and reinterpretation, although in differing measures at different times. As familiar meanings are found wanting, the nature of the epidemic is redefined, but as such redefinitions are established, they are once again woven into the fabric of ongoing experience through the reinterpretation of past events.

In this way, agents can be considered as *in situ* constructors of meaning of events as these unfold. A useful metaphor in understanding how this process is conducted, is to consider social orders as texts. When people deal with cholera they are "talking" about it, both through their speech and through their action, and "writing" about it, as they inscribe the meanings that cholera has for them in the materials they use to deal with it and, of course, in the actual written texts that they produce about it. There are several ways in which it makes sense to think about cholera as an articulation of texts. Such texts include the actual stories into which agents incorporate events in order to make sense of their experience (Gephart, 1993:1468-1474). Extending Hummel's discussion about managers, we may consider that people *"...care first and foremost about putting a problem together, in a way that makes sense to those concerned, (...). In the driver's seat is the need to construct intersubjective agreements defining particular events in which self and other are, and remain, involved. To steer their work group in the right direction, [people] talk to each other (...); the story and story-telling emerge as the prime means of orienting oneself."* (1991:36) Cholera as a phenomenon and as a process is a "mine" of anecdotal elements through and about which subjects can tell stories in their efforts to orient and reorient their own and each other's activity.

Although story-telling is a relatively obvious way in which the textual quality of cholera as a social construction is manifested, there are other more specifically organizational aspects of existence that relate to this textual quality of the event. One such aspect concerns scripts, *"...cognitive knowledge structures held in memory that describe the appropriate sequencing of events in conventional or familiar situations."* (Lord & Kernan, 1987:266) If stories constitute eminently inter-personal texts, through which agents engage one another, scripts are more precisely supra-personal texts, residing in the "memory" of institutions that pattern the behavior of present agents on that of previous agents. In contemporary society organizations are a key institution in which such scripting occurs, and in this sense, the health care sector is full of scripts. The "conceptual heuristics" (Delaporte, 1986) of clinical medicine and public health constitute powerful prescriptions encompassing a wide range of interrelated behaviors, even those arising in conditions not previously experienced. The relation between such scripts and the cholera event must be kept in mind in attempting to understand the meaning of the epidemic for the agents.

However, despite their institutionalized nature, it is crucial to understand that neither scripts nor stories are necessarily restrictive for behavior. On the one hand, stories directly engage the listener in the interpretation of the social situation (Hummel, 1991:36-38), while on the other, scripts are composed of "sub-scripts:" *building blocks that can be dis-assembled and reassembled as new situations may demand"* (Lord & Kernan, 1987:274). The challenge then is to see what elements of the scripts enter into the subjects' situated interpretations of the cholera epidemic.

In addition to these events of action and interaction, in which scripts or stories come into play, organizations as a whole are also amenable to a textual metaphorization: *"The organization must be regarded as a linguistic device and resource constructed during human sense-making activities (...). In creating descriptive accounts of organizational events, social actors verbally* construct *and* refer *to the organization as an interpretive schema or framework (...)."* (Gephart, 1993:1470-1471, my emphasis). Thus, organizations, the very object of our study, constitute a supra-personal text inscribed in the behavior of individuals. When we talk about "organization A" or "organization B" we are placing labels – names – on sets of human behaviors.

What I am doing in this research is "reading" cholera as inscribed in the "text" of (reported) behaviors and in the speech of my subjects.

However, the textual nature of social constructions has deeper implications. On the one hand, language is a universal means through which humans approach and organize experience as knowledge (White, 1992:83). As a result, the range of language available to us in a way both establishes the limits and creates the potential of our understanding and of our actions: *"The reality of everyday life appears already objectified, that is, constituted by an order of objects that have been designated as objects before my appearance on the scene. The language used in everyday life continuously provides me with the necessary objectifications and posits the order within which these make sense and within which everyday life has meaning for me."* (Berger & Luckmann, 1966:21, authors' emphasis) Furthermore, in "labeling" events through language, we simultaneously reduce the variety of empirical reality to the features of normal categories residing in our intellect (Berger & Luckmann, 1966:37). As a result, when people engage in the construction of an intersubjective social reality, mediated through language, they necessarily reduce the variety of their particular experiences to the limits of their common language.

On the other hand and as a consequence of the previous point, any change in as fundamental an issue as our language repertoire will imply changes in cognition and behavior (Smircich & Stubbart, 1985:728). Whatever changes are introduced in the way texts are assembled, either at the level of the rules guiding that assembly (the grammar) or of the elements used in the assembly and their relation to the wider context (the meanings), will have consequences for the way people understand their social order and behave with respect to it. Again, we have here an important theoretical referent for the study of cholera. Being a "new" event, agents must first deal with it on the basis of preexisting linguistic categories, and this should have an effect on their interpretation of the epidemic.

Furthermore, texts and contexts are originally parts of a unitary experience. If organizations can be considered as textual constructions, then certain meanings must be originally tied to specific contexts. As organizations from a variety of contexts come in contact with each other around the issue of cholera, the language used to deal with the disease in one context may move into another. The loosening of concepts from the

settings in which they originate should have important implications for variation in practice (*Cf.* Manning, 1979:669). Meanings and grammars will change, affecting the cognition and behavior of agents in subsequent contexts. Keeping this in mind will be crucial when I discuss the way in which international, national and local organizations relate to each other and in the process transfer concepts across contexts.

Finally, applying a textual metaphor to the interpretation of social orders has both epistemological and methodological implications that lead to the choice of a constructivist approach for this research. For one thing, science itself is a textual enterprise: what we are doing here is "dialoguing" about the subjects' "dialogue" concerning the cholera event (Jeffcutt, 1994:256). For another, if the research subjects' reality is constituted by texts, it is imperative that research address texts explicitly as an object of study (Gephart, 1993). In this effort the obvious model is literary analysis: what organization theorists and administrationists in the "narrative" or "textual" tradition have been doing is translating the concepts, constructs and tools of literary theory to the interpretation of organizations (Gephart, 1993; Hummel, 1991; White, 1992; Yanow, 1992). However, we must be careful in the application of the metaphor, especially in distinguishing between the literary text and the organizational text as concerns stability of meaning. White states that *"...poststructuralists are wrong to assume that a text does not have a stable meaning. It does in the intended meaning of the author. Poststructuralists are right when they say that a text can have many different meanings, but those different meanings are for the reader, not the author."* (1992:84) This might be true as concerns a literary text, usually fixed after an initial authoring process. However, as concerns a social text, there is a first ambiguity in that "readers" and "authors" are usually the same people, and a second ambiguity in that the text evolves continuously on the basis of the subjects' ongoing activity, rather than remaining fixed after its initial inscription.

Looking at organizations dealing with cholera is an exercise in the analysis of such a permanently changing text. The subjects both inscribe and interpret their understanding of cholera in an ongoing fashion. Therefore, I must approach the researched phenomenon as a process of social structuration, in which the apparent stability of organizations, and the apparent stability of the epidemic as a "natural phenomenon" are maintained only because the subjects constantly reassess the

relation of both cholera and organizations to past events, and their own personal relation to these phenomena.

Institutions and social construction

Treating the epidemic as a text might offer valuable insights but shows us only half the picture. Social orders have a "reality" to them that must be more directly addressed. This does not mean abandoning the social constructionist model in an inconsistent subjectivist – objectivist jump. Rather, it implies reconstituting the artificially separated composite of social object and subject. For one thing, people behave on the basis of "practical consciousness," that is, of their non-discursive knowledge and belief about the conditions of action when realizing the social order. For another, the social is not a detached product of discrete human acts, but rather the ongoing outcome and condition of the process of human agency (which is continuous, powerful, and interactive).[5] In consequence, the social order develops as reality by involving *"social practices (...) across time and space"* in the process of "structuration" (Giddens, 1984:2, 5-9), that is, in the putting together of social structure as an ongoing process rather than as a fixed outcome.

In studying the cholera epidemic, I will focus attention upon institutions, that is, the relatively long-term, large-scale patterns of repeated behavior that constitute the evidence of the structuration process (Giddens, 1984: 17), and upon the process of enactment as a localized means of structuration. By appealing to this analytical framework I will be able to relate organizations and individuals within a single, meaningful framework: on the one hand, I will interpret as social constructs the large-scale institutions that sustain the subjects' concrete experience of cholera, and on the other, I will also be able to interpret these same experiences, in their individuality, as localized, enacted social constructs.

Berger and Luckmann suggest that institutions are the way in which acting and interacting individuals render the openness of the human condition, only minimally

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[5] *Continuous* because it is pervasive and persistent. *Powerful* because it is constructed upon differences in relative capabilities of agents to "get things done." Finally, *interactive* because it becomes realized in the relations between people.

constrained by a material substratum, into a stable order (1966:49). A specific instance of this would be the experience of illness, as a social event, that builds on the substratum of disease, as the biological interaction between human organisms and inanimate or animate pathological agents.

We might say, then, that social order is preeminently a human production. What begin as conscious actions or interactions facing material challenges become unquestioned habits through repetition. For the individual this is important because it frees attention from routine action (Berger & Luckmann, 1966:51). More importantly, however, institutions gain their status in their transfer between old and new actors. For some "original" actors institutionalized behaviors may have been a part of personal history, understandable by their relationship to other personally experienced events. As these behaviors get repeated and other "new" actors socialized into their performance, the patterns gain "objectivity:" they are explained to others and to oneself simply as "the way things are done," standing in relative independence from the agents that realize them. Additionally, in this process institutions gain coerciveness over their subjects (Berger & Luckmann, 1966:53-56). In the context of modern mass societies, this process of institutionalization, and its attending implications of authority and control become very important. Most strategies undertaken to face challenges such as epidemics are part of a socially sanctioned repertoire of institutions that actors see as objective and external to them, concrete, and above all, mandatory.

Such coerciveness is a fundamental feature of institutions. Within the social order, institutions are no mere accidents. Rather, they act as rule-like entities within the experience of individuals (Powell & DiMaggio, 1991:9). This rule-like status is important in its subtlety: the basis of the coercive power of institutions lies, not so much in the consequences elicited by their transgression, as in the fact that they shape perception and cognition to the point that alternative ways of behavior are no longer even considered: *"To say that a segment of human activity has been institutionalized is already to say that this segment of human activity has been subsumed under social control. Additional control mechanisms are required only insofar as the processes of institutionalization are less than completely successful."* (Berger & Luckmann, 1966:52) In inspecting a social context such as the health sector in Guatemala, we must be conscious of these subtle means of control that act by establishing *a priori* the limits of

the thinkable. It is here, through institutionalization, that the control discussed above as a macro-social process becomes actualized.

Institutions present other important characteristics beyond this. One concerns the notion that organizational institutions may acquire an existence that is independent of any apparent purpose of efficiency or efficacy (Meyer & Rowan, *in:* Powell & DiMaggio, 1991:41). As a result of conditions of competition, governmental pressure and professional dynamics, modern organizations exhibit a high degree of "institutional isomorphism," that is, *"...bureaucratization and other forms of organizational change occur as the result of processes that make organizations more similar without necessarily making them more efficient."* (Powell & DiMaggio, 1991: 63-65) Through this concept neo-institutional organization theory offers us an analytical tool with which to approach the similarity between organizations in contexts that differ, either in space, as is the case between national and international organizations, or in time, as when contrasting historical and contemporary experiences with cholera. The point is that agents are patterning their organized behavior, not only on the features of the problems or issues they face, but especially, due to a variety of forces, on pre-existing organizational models.

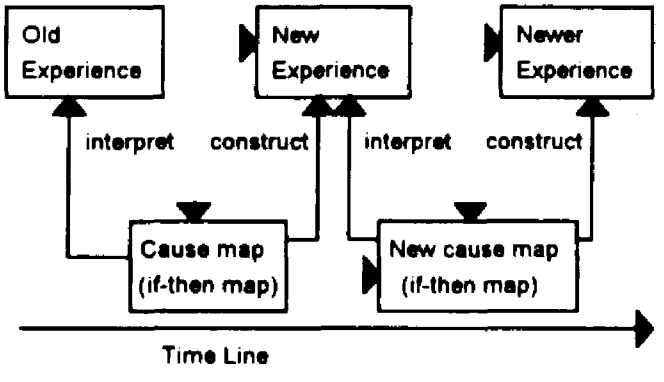
However, as a counterpoint, Jepperson underscores that *"[i]nstitutions are not just constraint structures; all institutions simultaneously empower and control. (...) they are vehicles for activity within constraints (...)."* (*In:* Powell & DiMaggio, 1991:146) Agents actively create their world from the resources they have at hand. Institutional isomorphism lets us see the commonalty in organizations derived from the "supply" of such resources, while the recognition of individual agency highlights the actual use and transformation of institutional resources in the face of changing circumstances.

Indeed, I should stress here the point made before, that the social order is a product of human agency. It is the ongoing result of people interacting more-or-less willingly on the basis of knowledge-in-common (Garfinkel 1967:76; Powell & DiMaggio, 1991:20, 23). Their willingness, furthermore, is not necessarily oriented with respect to

a specific institution, but rather to more immediate purposes in practice.[6] Thus, in studying cholera in Guatemala, we must find what actual combination of institutions is realized by agents in facing the epidemic's practical implications.

I will now resort to the notion of enactment as a means to understand how human agency sustains the very institutions that frame it. The concept of enactment refers to the fact that agents take on a "proactive" role in creating the world they inhabit (Morgan, 1986:130-131). Weick sees enactment as the laying down of the material and symbolic record of action. As such, he distinguishes in it two aspects: First, portions of "reality" are bracketed for attention on the basis of subjects' preconceptions. Second, action is conducted in the context of these bracketed portions of reality, again under the guidance of their preconceptions. In this way, action tends to realize and confirm the very preconceptions that guide them (Weick, 1988:307; *Cf.* Smircich & Stubbart, 1985:726-727). In other words, enacted environments are socio-material complexes, both resulting from practical action and existing meaning systems, and shaping further interpretation and action.

There are two important issues to consider, deriving from enactment. First, we must recognize that cognition lies directly in the path of action. What people *know* is intimately related to what people *do*. Following Weick, we may represent the relation between experience, cognition and enactment according to this figure.



We can see that in the context of this model the socio-historical and material events we label as epidemics evolve along the line depicted by the upper half of the figure, and the theoretical and practical (pre)conceptions of agents,

[6]For example, when a physician says: "Let's treat this patient with drug X," that physician is thinking about that patient's cure as the purpose in practice, not about contributing to the perpetuation of an institution such as "Western, chemo-therapeutic medicine."

including causal and prescriptive models of health and disease run along the lower half of the figure. The process of interpretation and construction that we call enactment bridges the gap between them.

Lest this approach produce too restricted a vision of social construction as an endogenous process driven independently from its context, I note with Weick that such divorce seldom happens because preconceptions have relatively weak effects on behavior, novel actions are constantly being realized, and memories of past enactment are flawed (1988:307). In other words, the bridge that enactment constructs between experience and precept is an unstable one.

This brings us to the second issue, which deals with the inextricable relation between "behaviors" and "conditions." This was insinuated above in the treatment of social constructs as texts which, to a large degree, derive their meaning from their contexts. However, the issue has a more empirically tangible referent in the enactment of environments: agents don't just construct *meanings* on the basis of text-context relationships, they actually construct their *"objectively" experienced environment* through enactment (Daft & Weick, 1984). Indeed, important dimensions of differentiation among organizations lie in their variable capacity to recognize this socially constructed nature of organizational environments and in their variable intent to manipulate the social construction process directly, and not just to manipulate its objectified outcome, that is, the "environment" (Daft & Weick, 1984:287ss).

As a result, while some organizational agents adopt a basically passive attitude toward their context, others attempt to modify it directly by operating upon themselves and by consciously or unconsciously altering both their own and others' perceptions and interactions, rather than simply by scanning an objectified environment (Smircich and Stubbart, 1985:731-732). Consequently, specifying the ways in which organizational agents manipulate the meaning of cholera becomes an important task in explaining differences between organizations in local, national and international contexts.

However, this does not mean that just any thinkable reality may be actualized through enactment, given the rigidity of institutions (Smircich and Stubbart, 1985:733). Further, the environment-organization divide is very "real" in the experience of subjects,

and harks back to differentiation as a fundamental category organizing thought and practice in the socio-historical milieu of modernity (*Cf.* Clegg, 1990:11-12).

In this way we are ready to come full circle in our articulation of the macro and the micro determinants of organizational reality that will serve to interpret the cholera event. We have seen that institutions, and organizations as a category of these, shape people's behavior, but also that people construct institutions, and use them in the willful pursuit of objectives. In the following section I discuss the means of this willful pursuit of objectives.

Summary: Social construction across contexts

The first issue raised in this section concerned the incorporation of place and time, as "external" dimensions of events, into the web of signification within which people lead their lives. Independently of what an agent or an analyst may think of as the "substance" of cholera, it is readily apparent that any discussion about the epidemic in Latin America starts from "something" that is now present in the research environment that was previously not there. In consequence, my analysis of the account subjects give of cholera will have to be sensitive to the way in which the cholera event is weaved into the overall patterns that frame organizational existence in Latin America. This means looking at the manner in which cholera might drive a reinterpretation of previously extant issues. It also means examining the way preexisting assumptions, issues and conditions limit the possible ways in which cholera is both interpreted and handled.

Over the better part of the last two centuries, medical practice has become increasingly formalized within the confines of a specific way of "seeing" disease and "speaking" about disease (Foucault, 1975). This textual nature of "Western" medical knowledge is important when we consider that it is such medicine that drives most of health care, both preventive and curative, in the vast majority of the world. Concepts, accounts of health and disease flow unencumbered across geographical and cultural borders, channeled through institutions that are at least superficially identical, no matter what their contexts may be: a medical clinic in rural Guatemala, and the language used in it are, save for differences in the amount of resources available, essentially the same *in appearance* as their counterparts in, for example, any large U.S. city. Looking at the

cholera event as a textual phenomenon will give us a better understanding of the text-context relation that sustains the dominance of the Western model of health care and its stability across contexts in the interpretation of the epidemic and its organization.

At the same time, cholera in Guatemala develops in the context of a specific web of signification. It is important to recognize the existence of this socio-material context in explaining the organization of cholera. Exploring the history of cholera in Europe and North America will help us to understand where the "texts" to which contemporary Latin American agents appeal in interpreting cholera come from, and the way in which these prescriptions have been spread throughout the world. Moreover, keeping in mind the asymmetries that shape the relations between centers and peripheries in that world will also help us to understand the actual course of events in the process of organizing for cholera.

Dealing with cholera as a major epidemic supposes the use of a common "language" of health care by a variety of agents (albeit within different contexts), which implies that common names must travel in some way between those who use them. The data collected will show us how the common concepts of cholera are actually transferred between local, national and international contexts as evidence of the asymmetric relations of power and influence.

At the same time, agents in each specific locality dis-assemble the elements of the dominant discourse – its scripts, its stories, its metaphors – and re-assemble them into locally relevant accounts. Institutional theory and social constructionism may help us to understand the reach of the "objectivity" of cholera for the research subjects, illustrating how the ongoing patterns of behavior and purpose shape the issues and the responses, what the agents perceive as the limits of the "thinkable" and the "doable," and how they go about their lives within these limits in times of uncertainty.

In sum, in this research I will bring three intertwined modes of analysis to bear upon the data about the epidemic. First, I will discuss the socio-historical development of modernity as the context in which Guatemala takes a peripheral position and as the origin of the interpretive frameworks that subjects use to interpret and enact cholera. Second, I will consider the center-periphery dynamic of modernity as the framework within which the relations between international, national and local organizations

dealing with cholera are placed. Finally, I will look at the way in which the social construction of the organizational or bureaucratic "solution" realizes and reproduces the macrosocial dynamics of modernity and the asymmetric relations between societies in the specific case of cholera.

III.
Methods

Introduction

In this chapter I will discuss the methods used in the research. In it I present three parallel aspects of my methods. These three aspects are not clearly distinguished in the discussion that follows. However, by stating them explicitly here it will be easier for the reader to find them in the text when they become present. The first aspect concerns the rationale behind the choice of methods. This includes an assessment of the benefits and disadvantages accompanying the specific methodological choices I made. The second aspect concerns the form of the research. Given the qualitative, emergent nature of the project, it is not too appropriate to talk about a research design. However, under this second aspect I am considering something akin to design: That is, the way in which the methodological prescriptions were translated into research operations. Finally, in this chapter I discuss the feedback I received from the actual performance of the research as it concerns the methods.

First and foremost, the methods in any piece of research must address the basic research questions. In my case, the methods chosen had to allow me to recognize how people organized a social order such as an epidemic, both in their understanding of the issue and in their organizational response. The methods would also have to allow for the contextualization of findings from different research sites with respect to each other and to the societies in which they exist. Given the fundamentally subjective nature of these features, the methods would need to be based on, and sensitive to, the theoretical and empirical tenets of social constructionism. At the same time, however, the methods must allow the localization of the data and their analysis within the larger socio-historical context.

Deriving from this "problematic imperative," the research methods I was to use had to answer to a series of requirements, some of these theory-based, others of a more practical nature. First, I am assuming that social contexts have fundamental

differences that can only be appropriately grasped and described by reference to the contexts themselves. For historical reasons, social science has been preeminently concerned with this identification of categories and description within the context of the Western industrialized countries. When research has concerned other societies, it has frequently been the case that researchers uncritically transfer theoretical categories and models to these other contexts. In the case of the field of Organization Studies, there has been little work done to theorize actually existing organizations as they appear in the Third World in general, and in Guatemala more specifically. Therefore, the methods used had to be of help in developing concepts and categories that could describe and explain the phenomena studied in terms that were contextually relevant to the practice of organizations in Guatemala.

Second, the methods must allow for the development of links between the findings and the larger body of organization theory. Third, the methods must make explicit my own preconceptions about organizations, acquired through my personal life-experience and specifically through my training in the Western organizational theory and social research tradition. This was not intended to exclude such theoretical preconceptions, but rather to increase my awareness of their pre-existing categories. Finally, the methods chosen should allow me to collect and process data within the constraints of relatively narrow time frames, given the difficulties inherent in obtaining and analyzing data from widely separate research sites.

To these ends I have favored in this research the use of qualitative methods that develop grounded theory, based on data obtained through long interviewing. Through the systematic collection and analysis of a series of accounts of experience with cholera I have attempted to fulfill the requirements specified above. For one thing, the use of qualitative data collection and grounded theory approaches to data analysis favor the development of contextually relevant categories and concepts based on the data analyzed, rather than on pre-established theoretical accounts (Strauss & Corbin, 1990: 112). In other words, although theory-generation and theory-testing are simultaneously pursued, it is at the generation of new theory that efforts in grounded theory research are mainly directed (Strauss & Corbin, 1990:23).

Furthermore, these are methods that allow the ongoing contextualization of data as a web of interactions, rather than as single, autonomous variables (Erlandson, *et al.*,

1993:16) At the same time, however, these approaches to research do allow for the construction of bridges between categories and concepts developed in the project and those present in extant literature. Indeed, the emphasis of grounded theory methodology on the development of theoretical sensitivity, that is, the awareness of the meaning of data, requires a constant and reflexive perusal of the literature in search of links between it and research findings. It is not enough to apply wholesale categories from the literature to the research, but neither is it justifiable to reject the literature.

On the same basis of the development of theoretical sensitivity, grounded theory methods constantly and intentionally evoke the researcher's preconceptions, not only as objects of awareness but also as sources of insight (Erlandson *et al.* 1993:38-40). This was especially important given my familiarity with the context of health care in Guatemala. While this posed the constant threat that I would overlook important items because I took them for granted, it also meant that I would find it somewhat easier to relate to the ways of thought and interpretation of my subjects.

Finally, the methods chosen require a back-and-forth movement between data collection and data analysis. Although in practical terms this is more cumbersome than a one-time data collection period, it also means that I had some flexibility in the scheduling of relatively short, more costly periods of data collection and longer periods of data analysis.

In practice, the research was conducted along two intertwined lines: the historical and the contemporary. These two lines were methodologically similar in that they concerned content analyses of texts. In the first case the texts used were historical accounts of cholera in 19th-century Europe and North America. In the second, the texts studied were transcripts of intensive interviews of health sector personnel (managers and care-givers) in a variety of settings. As concerns the processing and analysis of data, methods were similar and will be treated together. However, as concerns the definition of samples and collection of data there were important differences that will be treated separately.

Historical Data

The sample

For the historical component of the research the data were provided by a convenience sample. I used secondary historiographic accounts of the 19th-Century cholera epidemics in Germany (more specifically, Hamburg), France, Britain, England, Canada and the United States. The historical material on cholera has continued to expand since the 1960s, so that the sample I used was necessarily a very restricted one in relation to the overall universe available. The core publications used extensively as primary data sources are listed in appendix 2. Additional references were used to deepen understanding of some issues, but these were not processed in the same systematic manner as the core publications.

In selecting this sample I followed a variety of practical and theoretical criteria. These included the following: First, level of detail, especially concerning organizations and administrative procedures. Given that the focus was on organizations, I needed materials that referred more or less extensively to administrative arrangements, showing the presence and development of organizations in the context of cholera. Second, relevance for the historiographic literature. I decided to accept as a measure of the status of a publication its role in the overall literature on the topic. I soon noted that some publications constitute the "classics" in the field. Although many publications existed on the topic, only a handful were referenced in most, if not all of them. I decided to focus on these works as my sample. A further criterion was the language of publication. Although I had initially contemplated the use of some materials in French, I found the task too laborious for the limits of my time and linguistic proficiency. A final criterion was availability: Some materials would only have been available within a time frame that exceeded the limits within which I could work.

From the previous discussion it becomes evident that the final choice of materials for the historical research is the result of a compromise between practical limitations and theoretical necessity. However, I am satisfied that the sample is theoretically relevant. As discussed further in the following section, the publications reflect a variety of ideological and methodological positions, as well as describing cholera in several major European and North American contexts. Additionally, by

making the artificial distinction between "reporting" and "analysis" it was possible to identify, at least partially, what the different authors' preconceptions were as concerned the subject matter.

Data collection and preparation

The collection of historical data for the research posed special challenges, given the use that would be made of these. The historical accounts constituted data for my research only as far as they concerned description. I am conscious that frequently descriptive and analytical material are combined in the same text. Further, the theoretical agenda of each historian shapes the selection and presentation of events included in each account. However, this was compensated for by the use of multiple sources. Among the authors used extensively there is representation of a wide variety of intellectual persuasions. The historians consulted vary from Marxist to Structuralist to strictly Positivist. Additionally, some of the histories are strictly "descriptive," while others studies are written in a more analytical vein. Finally, although most of the material is expressly historical, in some of the literature analyzed history is used only as background material for a biomedical discussion of cholera.

Once collected, each title was read and the relevant portions excerpted. Relevance was judged by the presence of descriptions about administrative and organizational arrangements, conduct of government, health-related personnel (mainly the medical profession), and the community, as well as of the development of the biosocial features of the epidemic (e.g., spread, death and disease).

The excerpted material was transcribed verbatim into computer text files with the aid of a word processor. Each file contained all the excerpts of one source, each excerpt referenced for page numbers. The files were then saved in ASCII format and prepared for analysis. This preparation consisted of line numbering and margin formatting that facilitate content coding, and was done with aid of *The Ethnograph*, a qualitative analysis support software program (Seidel, 1988).

Contemporary Data

The sample

The sample for the interviews included 33 persons involved with the cholera epidemic in different organizations. Of these, twelve belonged to two international technical and financial Cooperation Agencies based in Washington, D.C., and having field units in Guatemala. The term "Cooperation Agency" refers to organizations that channel money, supplies and technical expertise across countries. Of these twelve subjects, seven belonged to a multilateral entity (bringing together interests of several countries). The other five interviewees worked for an Agency of a national government. Thirteen subjects were involved in different capacities with the Guatemalan National Cholera Commission. Finally, eight subjects were health care workers in a medium-sized Health Center serving a low-income neighborhood in Guatemala City.

The guiding principle in the selection of organizations for study was organizational experience with cholera. Thus, the two Cooperation Agencies were chosen because of their extensive work in Guatemala, where cholera has been an ongoing problem since 1992. The choice of the National Cholera Commission was practically self-evident as it is the main organization dealing with cholera at the national level in Guatemala. Finally, the specific Health Center was selected after discussing a variety of options with the epidemiologist in charge of one of the most cholera-stricken neighborhoods in Guatemala City.

In the case of both Cooperation Agencies and the National Cholera Commission the subjects were members of an organizational unit set up specifically to deal with cholera. In the case of the two Washington, D.C. Agencies these were inter-departmental and multi-specialty task forces. The National Cholera Commission is itself an interagency task force.

For the case of the Cooperation Agencies and the national Cholera Commission, the sample was collected through "snowball" sampling. Initially one or two key informants were identified in each context. In the case of the Washington, D.C. Agencies this was done by calling over the telephone and inquiring for the person or persons in charge of the cholera epidemic in Latin America. For the case of the

National Cholera Commission I relied on my previous experience and acquaintances in the health sector in Guatemala, as well as on a fortuitous contact made through the Internet while still in Albany. In the Health Center I began by contacting the Director and the Head Nurse. Further informants in each context were identified by asking each interviewee for references to other potential informants.

Although *a priori* there might have been some concern that the sampling method would lead me to talk only with members of certain coalitions, in practice I managed to interview most individuals in each context. Furthermore, this manner of sampling was not only convenient, but also necessary, because it helped me to reconstruct the networks in which meaning might be shared. The limitations of the sampling methods was not too great a concern in the International Agencies and in the Health Center, where interviewees all belonged to single organizations, and in which I finally interviewed most of the people involved with cholera. In one of the Washington, D.C. agencies I interviewed 5 of the 6 relevant subjects. In the other I could not reach 3 people because they were away from the country at the time. In the Health Center I interviewed all personnel available, except two persons who refused to be interviewed,[1] and two more whom I could not contact due to their schedules (eight interviews out of twelve possible subjects).

In the case of the National Cholera Commission I was less certain about the existence of a network, as the Commission gathers representatives of a variety of organizations. However, it appears that the sample collected does represent a network of interacting individuals, as on average each interviewee referred me to four other interviewees, or was referred to me by as many others. To a degree, individuals tended to refer me to others with whom they had dealings for technical reasons. For example, an interviewee that was an epidemiologist at one institution would tend to refer me to epidemiologists in other institutions.

There is one point that needs clarification: Although the phenomenon under study has implications both within and outside the limits of formally and publicly sanctioned organizations, I arbitrarily excluded from my studies people not directly

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[1] The reason for this refusal is explained in the following section

involved in organizations dealing with cholera. This exclusion refers mainly to members of the broader community in Guatemala. Aside from the material limitations that I faced in conducting my fieldwork, there is a theoretical justification for the exclusive choice of formal organizations as objects of study. While we might expect to find differences between, for example, the understanding of health and disease held by a physician in a modern hospital and the understanding of a village healer, we tend to expect homogeneity in the understanding of physicians in "modern" hospitals, even when situated in national contexts that differ significantly from those in which the hospital of Western medicine arose. Thus, it is assumed that the members of a large reference hospital or a health administration bureaucracy in any given context operate in a manner that is alike, *mutatis mutandi*, to that of members of similar organizations in almost any other context. Therefore, searching for differences among such supposedly similar organizations should be highly enlightening.

Data collection and preparation

Choice of collection method

The initial step in the data collection involved carrying out "long interviews" with subjects (McCracken, 1988). These are loosely structured, in-depth interviews which allow the subject to expand on aspects of an issue they consider relevant. In this way, one may elicit from the subject vivid and detailed information on specific topics with a minimum of researcher direction.

This method of data collection has a number of advantages to it. First, it facilitates the construction of theoretical categories that are close to the reported experience of the subjects. Further, such "intensive" interviewing explores and represents in detail the structure of meaning systems as used by the interviewees themselves. In the same way, long interviews allow the research to go beyond the stricture of the case study, to explore the relations between concepts, rather than between individuals. Thus, in the case study, the structure of the research account is provided by the flow of events. However, in the type of research presented here, the interest is in elucidating a meaning system, that is, to present how the agents make sense of their world, and how they articulate its varying elements together. The open and unstructured nature of the long interview allows the researcher to reconstruct these

meaning systems, pursuing the items that appear more interesting in each interviewee's discourse.

Additionally, the nature of the data collected facilitates theorizing that is much more complex than that allowed by the relatively simplistic, deductive propositions used in more formal hypothesis testing. Finally, intensive interviews are both less intrusive and less time consuming than more extensive participant observations (McCracken, 1988:10).

Of course, such an approach to data collection is not free from its own shortcomings. Under equal conditions of resource availability, this method places important limitations on the collection of data from a large number of subjects when compared to survey methods. Compared to case studies, intensive interviewing has been charged with limiting the degree of objectivity that can be attained, given the fact that the multiple interviews are not all connected by the same event. Additionally, intensive interviewing may not produce as naturalistic a reproduction of the research setting as a participant observation could. Finally, some might criticize the lack of parsimony which a complex description of experiences induces in the theory.

Given this range of benefits and disadvantages, I chose to use this data collection method because my overriding theoretical concern was with the development of concepts, categories and relations that would help me to explore the research problem in terms grounded on the experience of the interviewees and with relation to their socio-organizational context, rather than in terms of normatively pre-conceived categories. The social order is "real" insofar as it affects the subjective experience and the behavior of individuals.[2] Furthermore, as discussed in the previous chapter, people mediate their experiences through language (Berger & Luckman, 1966; White, 1992). From these considerations it follows that interviews generate eminently acceptable data insofar as they not only account for, but in fact constitute that subjective experience. In other words, it is not so much a matter of interviews being either a partial or a complete picture of "social reality" (*cf.* McCracken, 1988:28), but rather of interviews being at the

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[2]"If men define situations as real, they are real in their consequences." (W. I. Thomas, *The Child In America*, quoted in McHugh, 1968:7-8)

same time an integral part of social order and one possible picture of that same social order (Silverman, 1985:157; 170-177).

In more pragmatic terms, the research had to account for regularities and variations both within and between three relatively distinct contexts. To do this I needed a method that allowed me to be sensitive to phenomena and processes for which the literature and my own experience could not prepare me.

Although the data collection method would not allow me to work with a large sample of interviewees, this was of relatively little import, as my main concern was ensuring theoretical relevance (Strauss & Corbin, 1990: 177-179 and 185-187). In qualitative research, sampling is guided theoretically more than statistically. The data derived from the sample must allow, above all, a detailed and specific identification of relationships between concepts and categories of the data. In other word, the representativeness of the sample is gauged mainly by the theoretical density of the explanations that can be gleaned from it (Strauss & Corbin, 1990:178).

The relative "subjectivity" of the data collected does not constitute a limitation. First, for the same reasons stated above, it is the tracing of relationships between concepts and categories that is being attempted in this study, not simply the detailed – and probably equally subjective – description of an event. Second and more importantly, it is precisely the accounts of subjective experiences, both as an interpretation and as a motor of behavior, that becomes the target of study. It is important to be very clear about the nature of the data. As mentioned above and discussed in the literature review, the subjective experience of agents is the main, if not the only reality constituting social life. That volatile subjective experience becomes "inscribed" in a variety of ways, including, but not limited to institutions, texts and orality, which social scientists then use as data sources. In my research it is the interviewees' *accounts* of their subjective experience that constitute my data, not any possible "objective" events to which they *might* refer. As Silverman points out, *"Once we rid ourselves of the palpably false assumption that interview statements can stand in any simple correspondence to the real world, we can begin fruitful analysis of the real forms of representation through which they are structured."* (1985:16)

Further, I am starting from the assumption that reality is varied, and that we need more understanding of organizations in their situated actuality. I consider that the generalizability lost through the lack of parsimony of my data (long, occasionally rambling segments of discourse in a variety of styles and on a variety of specific topics) is more than compensated for by the specificity of the theory generated as concerns the issue under study. "Organizations in Guatemala" and "the social construction of issues across contexts" are both relatively unexplored categories of phenomena. The rich detail offered by the data collection method is important if we wish to recognize and conceptualize the specific qualities of the contexts under study (*cf.* Silverman, 1985, 21; Garfinkel, 1967).

Conduct of interviews

All interviews were conducted by me over a period of one year. I contacted potential interviewees either personally or over the phone. In most cases this meant referring to previous interviewees or personal contacts as a means to gain access to peoples' trust. In previous research I have found that approaching potential interviewees on a personal capacity places people much more at ease than if I present myself as connected to a specific institution. This experience proved correct in relation to the present research as well. In order to gain access to the Health Center I had first to obtain a permit from the immediate superior administrative level, known in Guatemala as the Health Area. Upon starting research in the Health Center I experienced some evasion and distrust. It turned out personnel thought I was there to do an evaluation on behalf of the Health Area and were wary of talking to me. Once this misunderstanding was clarified work proceeded smoothly.

After presenting myself as a doctoral student, I would describe my research as an exploratory study into some of the administrative aspects of the cholera epidemic, and request their consent to an interview. At that point I would explain that the interview would be tape-recorded, and that confidentiality would be respected. Three persons contacted refused to be interviewed. The first of these belonged to one of the Washington, D.C. agencies, and I do not know the reasons for her refusal. The other two worked in the Health Center, and refused as part of the misunderstanding described above. All other individuals contacted agreed to the interview in the terms explained.

Appointments were fixed, usually for interviews to be conducted in the office of the interviewees. In most cases this provided an adequate interview environment, as almost all of the interviewees either had a private office or access to facilities with an appropriate degree of quiet and privacy. In the case of one person from the Health Center the interview was conducted at her home, as she was on vacation at the time.

Most of the interviews were conducted in Spanish, except for five interviews conducted in English with members of one of the Washington agencies. Most interviewees answered the interview in their native language, except for three subjects in Washington who were Brazilian and one US citizen in Guatemala. These four subjects were all interviewed in Spanish.

Before beginning the interview proper I would repeat the explanations given at the initial contact, with special emphasis on the use of the tape recorder and confidentiality. Only one individual interviewed objected to the use of the tape-recorder. I took notes of that interview, but decided against the use of these as a primary source of data, given the disparity in detail between these notes and the rest of the interviews. Additionally, one individual in Washington did request at one point that I turn the tape-recorder off when he discussed a specific issue. The machine, a small, portable micro-cassette recorder was placed in full view of the interviewee. Fortunately, in almost all cases I found the quality of recording outstanding, giving minimal problems in transcription.

Although the use of the tape-recorder introduces an element of distraction and might raise questions about confidentiality in the interviewee's mind, it compensates for these problems by allowing the interviewer an undivided attention to the interviewee's speech and by collecting an account of the encounter with a richness of detail much beyond what can be obtained with any but the most sophisticated shorthand skills (*cf.* McCracken, 1988: 41-42). Furthermore, in the case of my research, the limitations in time made it imperative that richness of detail be obtained with a minimum of contacts. Finally, the topic was not judged as "sensitive," an appreciation that was confirmed repeatedly in conversation with the interviewees, so that the recordings posed a relatively low threat to intimacy.

The interview data were collected during four distinct periods. In the first period I conducted four interviews in Washington, D.C. As a result, I introduced some adjustments to the general form of the interview guide. After a preliminary analysis of the data, the rest of the Washington, D.C. data were collected. The National Cholera Commission interviews were conducted several months later, followed after about a month by the Health Center interviews. Between each data collection period I processed and analyzed both data from the historical line of research and the other interview sites.

The conduct of the interviews was framed within the model of the long interview (McCracken, 1988). This requires the use of an interview guide, presented in appendix 1. The guide was designed to induce the interviewees to talk about their personal experience, without unduly restricting them. To that effect, questions were relatively open-ended and general in nature. They were accompanied by probes intended to explore some of the issues I could foresee would be raised. Additionally, as was frequently the case, when the interviewee talked about issues I had not considered previously, I would probe these as circumstances allowed during the interview.

The interview guide served the further end of structuring my interview work so I would not omit important issues (McCracken, 1988:24-25). I found through repeated use that the general structure of the interview became "second nature" to me. However, I always kept a copy of the guide in sight during interviews. Much to my discomfiture, one interviewee took the guide from me as I was about to begin the interview! However, he scanned through the guide, and proceeded to talk without need of much prompting and in great detail about his experience vis-à-vis the issues I had included.

The interviews would start with a "grand tour" question that would allow the interviewee to talk at length (McCracken 1988:34-35). This served two purposes. First, it helped to put the interviewee at ease, and second, it showed me what were probably the main concerns of the interviewee in relation to the topic. I explored two alternative strategies for the opening question. One was to ask the interviewees to talk about their work and experience with cholera, the other was to pose a general biographical question. In contrast to McCracken's suggestion (1988:34), I found this second approach made interviewees uncomfortable, so I decided to use the first approach and leave the more personal questions for the end of the interview.

The "grand tour" question was followed by probes intended to fill in the picture presented by the interviewee. I explored descriptive aspects of the activities (*"What activities are performed regularly by your unit concerning cholera?"*), as well as attempted to establish what relation cholera had in time and space with other aspects of the interviewee's unit's work (*"How did your unit get involved with cholera?" "How do cholera activities fit in with other activities?"*), and with other surrounding organizations or units (*"What other units does your unit interact with concerning cholera?"*) (McCracken, 1988: 36). As a result of the opening question and its probes I had a more-or-less detailed picture of what the interviewee considered as cholera, responses to cholera and relevant actors.

Next came a contrast question that built upon the interviewee's account of surrounding organizations and organizational relations (*"How do organizational activities vary...?"*). Through it I identified and explored the dimensions along which interviewees perceived differences in organizational "responses." Additionally, I could explore causality by asking about the structure of the situation (*"Why do activities vary from one organization to another?"*). Contrasts were established, not only between the interviewee's organization and organizations in its immediate context, but also between organizations in other contexts (local vs. national, national vs. international, and so on). Through further probing I explored the attributes interviewees imputed to their organization and to organizations outside their immediate experience. (*Cf.* Spradley & McCurdy, 1972:73)

Further structural elements were explored by asking the interviewee about normative elements of organizational response (*"In your opinion, what are the best ways to address the cholera epidemic?"*) and about the roles of specific groups of agents (physicians, other personnel, the community). Such structural questions elicit taxonomies used by subjects in organizing their experience (Spradley & McCurdy, 1972:67).

Following this I explored issues of causality directly by asking what explanations the interviewee had for the presence and/or absence of cholera. This was followed by a "catch-all" question (*"Is there anything I haven't asked about which you think I should know?"*) in order to avoid overlooking any issue the interviewee may still wish to raise. I

closed the interview with a request for an account of the interviewee's personal and professional history.

In addition to the planned probes discussed above, throughout the interview I made use of probes intended to sustain the interviewee's talk in an unobtrusive manner. This included "floating prompts," whereby talk is elicited through devices such as non-verbal or non-specific prompts (*"**Uhu**"*), repeating key terms (*"It goes through the projects." "**Through the projects?**"*...), or asking for explanations (*"You know, it didn't have the sort of wildfire effect, you know, that it did, that is..." "**Why was that?**"*). (McCracken, 1988: 35-37)

At the conclusion of the interview I reiterated the notice on confidentiality, offered to clarify any remaining doubts and asked for references to other potential interviewees to whom I could quote their name as an introduction. The record of references gave me, besides the obvious access to further research subjects, the possibility to check on the density of the network through the cross-references between subjects.

The interview guide is deceiving in its simplicity. Although there are few questions, the open nature of these, added to the use of probes, had as a result that most interviewees spoke at length about their experience. It was not infrequently that the first question in the interview (*"...could you give me an overview of what your unit is doing specifically about cholera?"*) would elicit fifteen minutes of almost uninterrupted speech. The result was a large amount of data: Most of the interview transcripts are twenty to thirty pages long in single-spaced typing.

Data processing

The recorded interviews were transcribed verbatim in their entirety into computer text files with the aid of a word processor. As in the case of the historical data, the files were then saved in ASCII format and prepared for analysis with the aid of *The Ethnograph*. *The Ethnograph* is a program that proceeds as follows. First, from the original text file it generates a file with line numbering. Following this, the analyst's codes are recorded in a file separately from the actual data, and are cross-referenced to the line numbers in the "numbers" file. As a result, in terms of the software, the

coding scheme is completely independent from the data. I started my analysis on the English language data, and so began my coding scheme using the English language both for social science terms and for native codes. Concerning the social scientific terms this was also driven, although unconsciously, by my doctoral training having taken place in English, and because this is the language in which the dissertation is being written. As I worked with data in Spanish, I introduced native terms in the Spanish language. However, I maintained the rest of the coding scheme in English.

Data presentation

An important issue concerning language deals with the presentation of data. Given that the final report was to be written in English, I had to translate much of the data from Spanish, a question which poses some problems concerning the equivalence of meaning across languages. Overall, I have relied on my native understanding when translating. This applies, first, to the English/Spanish transfer. I consider myself a native speaker in both these languages, which made the nuances of meaning in either readily accessible to me. When need arose for the translation of colloquial expressions, I have resorted to a bilingual, native U.S. English speaker of Guatemalan ascent in order to find the most appropriate expression in colloquial U.S. English.

The second dimension across which "translation" occurred was from the context of my subjects to the context of academe and research reporting. Here again I resorted to my experience, both as a physician and as a bureaucrat in health care in order to preserve meaning in translation. Perhaps the greatest challenge in this respect concerns some of the subjects in the health center, from whose life experience and language my own differ to a greater degree than is the case with respect to the bureaucrats and physicians in the sample.

Concerning the written presentation of the data I have used the following conventions:

> All names of individuals and references to job positions or other identifiers in the interview contexts have been changed to preserve anonymity. After each quotation I include in parenthesis the subject's fictitious name, organizational context, and profession. The subjects from the international

context I identify as *"Agency"* when referring to the organization's headquarters in Washington, and as *"Mission"* when the subject works for an International Agency's bureau in Guatemala. Interviewees from National Government organizations and those from the Health Center I identify with these same terms.

When I judged that some ambiguity might arise from the quotation I have added a short introductory comment before it.

Analysis

Once prepared, both historical and contemporary data were treated in a similar way, so the general procedure will be described and discussed. Analysis was conducted along the lines of the grounded theory methodology, developed by Glaser and Strauss (1967; *see also* Strauss & Corbin, 1990) In this methodology, qualitative data are analyzed in a way such that theory *"...is inductively derived from the study of the phenomenon it represents. That is, [the theory] is discovered,*[3] *developed, and provisionally verified through systematic data collection and analysis of data pertaining to that phenomenon"* (Strauss & Corbin, 1990: 23). To this end, the researcher codes the data progressively and iteratively through three distinct but interrelated procedures (Strauss & Corbin, 1990):

1. Open coding. At this, the opening stage of the coding, the whole of the texts were analyzed and conceptualized. This meant taking relevant segments of the text and tentatively assigning them "labels" that describe the contents in conceptual terms. By "relevant segments" I mean pieces of text that can be understood as a whole, and which the researcher feels comfortable manipulating. For my case this was usually anywhere between two or three sentences and two or three paragraphs.

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[3] I must note here that although I attempt to apply the grounded theory approach in this research, I take issue with the notion that theory is *discovered* and developed. It is, I think, more precise and realistic to label this process as one of *invention* and development. After all, theory is nothing but a contingent account of the nature and relations we think exist within a given set of phenomena, constructed within the parameters of either a theory or a methodology, or both (Erlandson *et al*., 1993 xiv)

Conceptualization implies labeling the text in terms that transcend the singularity of the phenomenon, inducing the discovery of regularities and variation across instances. The actual labels may have a variety of origins. First, they may be social scientific terms, drawn from my previous training and experience or from the literature Second, the labels may be "native" terms, that is, concepts used by the subjects themselves. For example, I used the native term "guardia" to identify segments where the subjects in Guatemala described the notion of lowering their guard after the first episode of the epidemic. Finally, the labels may be terms that conceptualize the contents without any specific reference to social scientific categories or to native categories. For example, I use "water" to identify segments where the subject is talking about ... water![4] The initial open coding process resulted in between 200 and 250 separate codes. Most of these had very low frequencies and although some did offer important insights on other codes further on in the analytical process, they were at this point not pursued as main categories.

Additionally, concepts were categorized, or grouped, according to their similarity along relevant dimensions (Strauss & Corbin, 1990:61-74). The data generated by the subjects are both very broad in the topics they cover and in the complexity which they contain. All coding is a researcher-driven attempt to reduce this wealth and complexity of the phenomena under study to the cognitive and practical limits of the researcher (Spradley & McCurdy, 1972:61). However, by using an open coding scheme applied to all the data, both conforming and deviant data may be recognized (Silverman, 1985:21-22). In this way, rather than engaging the data from within the narrow confines of a rigid research design concerning a few theoretically deduced variables, this research searches for the relevant categories in the data, and only then focuses in on them as the limits of cognition and practice may allow. In this context, the theoretical training of the researcher serves, first, to sensitize the researcher to the dynamics under study. Additionally, the theory suggests, through its various metaphors, ways to interpret the data. Further, theoretical training plays the important role, usually not discussed, of

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[4]Of course, even such deceptively "neutral" terms are loaded, either by the researcher or by the subjects For example, "water" might have a variety of native meanings, which surfaced as the coding process became more complex. Similarly, "ORT" (Oral Rehydration Therapy) is a code that implies a large amount of "background knowledge" about health care, even though it is not the exclusive domain of the subjects

cultivating "habits of the mind" that are conducive to inquiry, such as "causal curiosity" and willingness to doubt one's own assertions.

2. Axial coding. Through this procedure previously identified categories are explored further in search of causal chains leading to or from them. Conditions, properties, dimensions and consequences of specific phenomena are then determined, both in their generality and in their variability across cases (Strauss & Corbin, 1990:96-115).

3. Selective coding. At this stage the concepts and categories developed through open and axial coding are integrated into an overall explanation of what has been studied. It involves the explication of a general "story line" embodying the core category of the analysis, the relation of subsidiary categories to that core category, and the validation and refinement of categories (Strauss & Corbin, 1990:116-142).

As pointed out above, these three procedures are conducted more or less simultaneously, as is the iteration between theory generation and the testing – through the search for validating evidence – of the generated theory. Further, grounded theory approaches attempt to maintain sensitivity to two key aspects of the social order: On the one hand, there is a constant quest for process: grounded theory forces the researcher to ask how relatively distinct instances of action or interaction are linked to each other in an overall process. On the other hand, grounded theory forces the researcher to make explicit the manner in which causal chains are established between social phenomena at diverse levels of complexity. Rather than assuming relations between levels (*"The International Agencies usually get the national bureaucracy to do their will"*) it questions such relations and attempts to specify them in their most concrete detail (*"International Agencies set up training programs through which members of the national bureaucracy are socialized into their expectations"*). (Strauss & Corbin, 1990:143-157, 158-175).

Overall, the analytical process may be seen to progress from an "opening" phase, in which the variety of empirical data are initially conceptualized, through a process of categorization that reorders concepts and relations, into a "closing" phase in which only certain sets of concepts and relations are explicitly developed for reporting. In other words, although the product of the research – in this case the dissertation

report – attempts to present and discuss certain aspects of the subjects' experience in rich detail, it makes no claim to presenting *the* "complete" or "true" picture, which given the multiplicity of social realities is nonexistent, anyway.

Finally, an important additional aspect of the analysis was the keeping of "memos." These are *"written records of analysis related to the formulation of theory"* (Strauss & Corbin, 1990:197). In memos, operational and analytic insights are recorded and referenced to the data that suggest them. Through the use of this device I could keep track of the results of the three coding schemes described above and of my train of analysis, and relate all of these to one another. In a way, the iteration between data analysis, theory building and theory testing through further data analysis is represented physically, on the empirical side in the coded records of the interviews, and on the analytical side in the memos.

Gauging the Quality of this Research

In considering whether the research presented here constitutes a valuable addition to knowledge or not, it should be kept in mind that qualitative research of this type poses particular challenges in terms of ensuring quality. These should not be understood simply in terms of measuring the work against traditional standards of research, but rather in terms of rethinking the standards themselves. The goal here is to produce "trustworthy" research. Erlandson *et al.* suggest four criteria against which "naturalistic" or "constructivist" research of the kind presented here should be evaluated (1993:29-38):

Credibility: In naturalistic inquiry an effort is made to match the constructed reality represented in the research with the constructed reality in the subjects' minds (Van Maanen, 1983:256; Silverman, 1985:156ss, Lofland & Lofland, 1984; Strauss, 1987; Spradley & McCurdy, 1972; McCracken, 1988). Along this dimension, my research benefited from my previous and present ongoing engagement with the field of study. A further advantage was gained from the triangulation of multiple perspectives on multiple issues, as respondents from the three organizational contexts spoke about each of the other contexts as well as about their own. In more conceptual terms, a similar triangulation was obtained by contrasting the historical and the contemporary

cholera data, and documentary products of the organizations with the members' responses.

On the downside, due to limitations of time and mobility I have not had the opportunity of letting the subjects themselves evaluate whether the products of my analysis constitute an adequate representation of their experience. To some degree, however, I discussed partial findings with colleagues in the field.

Transferability: Qualitative studies of this kind concern complex subjects presenting a multitude of elements, frequently connected through indeterminate interrelations. In order to allow the learning from this work to be extended to other applications it is fundamental to provide readers with as detailed a picture of the subject of study as possible (Van Maanen, 1983; Silverman, 1985). To that end, this research has used a purposive sampling that allows the tracing of details in the subject, rather than producing an undifferentiated picture. Further, I resort to the presentation of accounts, either verbatim or referred, of the subjects' own experiences. The simultaneous exploration of three research sites obviously strains the intention of detailed accounting. However, exploring three sites also became in itself a test of the transferability of findings as I contrasted results from each context with the other two.

Dependability: The research tradition within which this work has been done assumes that agents construct multiple social realities in an ongoing process. Furthermore, the research design in qualitative efforts evolves with the data collection. Therefore, the goal of the research method must be to account for "shifts" in reality, both of the subjects as they reconstruct their social world, and of the researcher as the study evolves with discovery. To do this, emphasis must be placed upon keeping track of the development of the engagement between research process and research subjects (Van Maanen, 1983:252; Strauss and Corbin, 1990). The coded transcripts of the interviews and especially the keeping of memos are an effort to satisfy this criterion.

Confirmability: Finally, qualitative research recognizes that research findings are the complex result of the researcher's theories and preconceptions and empirical materials. It is therefore important to keep track of the process through which these findings are generated. Again, the memos and code searches attempt to ensure this confirmability of findings (Strauss and Corbin, 1990; Strauss, 1987).

IV.
Interpreting Cholera in Practice

"...cholera is a very small problem, right? There are several reasons why it garners so much attention. One is, it attacks adults, O.K? Productive adults. The second is it has that kind of historical image of the great leveler, the great killer. But when you look at the number of cases, and you look at the deaths from cholera in Latin America, it pales in comparison with diarrheal diseases in kids! Means nothing! It's not even one percent, but it's a heck of an opportunity, a heck of an opportunity...Why? Because people get galvanized over the issue of cholera, they might get it. And the other interesting thing is, that the same things that work for the treatment of dehydration in kids also works for cholera, namely ORS,[1] and oral therapy. So this was a real opportunity to say, 'Look! You know this clinical cure that we're talking about, has application not just for kids, but across the board'." (Tom, Agency Physician)

Cholera means many things to many people. It is an event that at the same time evokes fear, hope, and desperation. Its contemporary material impact, when compared with other diseases, and with its own effect in other times, has been relatively minor. Yet it has been accompanied by strong feelings and frantic activity. How can these contrasts be understood? In chapters IV to VI I will begin to unravel the complexities of the problem by discussing the micro-organizational processes that explain how the cholera epidemic has been constructed as a social phenomenon in the three organizational contexts studied. I will complete the picture through chapters VII and VIII, where I will add the perspective of socio-historical and inter-organizational dynamics.

The social construction of cholera as an organizational phenomenon has two inter-related aspects: On is the identification and interpretation of a "problem." This is a process that builds on existing practices, ideologies and explanations of disease and organizations. The other is the actual practices through which the cholera event is constructed and addressed.

However, these two facets of the cholera epidemic are inextricably linked: the moments of "issue" and "response" cannot be considered as separate other than in a partial analysis. To illustrate how this unity of "issue" and "response" occurs I will

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[1] Oral rehydration salts

discuss how agents at the same time interpret the problems they deal with, and the actions they take with respect to these problems. I will also show how subjects shape their account of each of these aspects by reference to the other.

The Relation of Interpretation and Practice

How do organizational agents recognize and circumscribe that which they deal with? Objectivist interpretations of social reality see the events as external phenomena that impinge upon the senses and the consciousness of individuals. In contrast, social constructionism posits that the relation between people and their social reality is fluid, being constantly elaborated in practice. Furthermore, if social reality is not an independent "object," but rather an intersubjective product of action and interaction, then interpretation is a pervasive part of everyday life: it is both the substance and the product of practical action (Giddens, 1984:xxii).

The social construction of events is tied to action, and is therefore locally based. It evinces, not only underlying similarities in the ways people engage with their reality across contexts, but also important ways in which they differ according to local conditions. Furthermore, it is a process, not a product. The process of interpreting and articulating an event in practice is never complete: trends in contextual conditions and the changing perceptions and volition of agents ensure that what was "true" about an event yesterday, may no longer apply today, even though the "name" of the event – a label – may remain the same. As I will show for the case of cholera in Guatemala, understanding the trends that this social construction and reconstruction of cholera may be following helps us to understand, not only the phenomenon itself, but also the fundamental elements and articulations – the "implicate order" (*Cf.* Morgan, 1986:233-234) – shaping the social order in a given context.

I will begin my exploration of the data by an account of the practices I found involved in the articulation of the epidemic as a problem. In what contexts of action did the subjects delimit the cholera epidemic as an event? Furthermore, how did they understand their own practice, and its relation to their "object?" Building on Weick's suggestion that a first stage of enactment involves bracketing a portion of reality in terms of pre-established categories (1988:307), I go on to explore the causality models implied in agents' practice and discourse. These are the cognitive bases upon which

agents, first, articulate their practical action, and second, rationalize it in their accounts of cholera. Following this I will discuss three specific areas through which a dominant mode of interpreting the epidemic and organizing for it is generalized in the case under study: personnel training, community education and outreach services. Having shown the commonalty that these three areas introduce across the contexts, I will discuss the local factors that result in variety between these contexts. I will end the chapter by presenting evidence about the trends that the meaning of cholera for subjects is following through time in the case under study.

Bringing Together "Issues" and "Responses"

Bred within a rationalist and objectivist tradition, we tend to think about our experience in terms that clearly delimit contexts and contents. Indeed, even our language is colored by this object-subject distinction, to the point that social scientists have had to invent terms to signal the interpenetration of subjects and objects in society. Hence the word "intersubjective," for which no common language equivalent is available. I came to the research with a similar, and unrecognized, perspective. The data would soon prove how limited this approach was, and how comprehensively the subjects' world of practice was intertwined with the "objectivity" of cholera. Subjects in all contexts repeatedly spoke about both the problem and their response to it within the same statement, reflecting the unity these two aspects had in their experience:

> *"...cholera is a preventable disease, if one takes good hygienic measures, we won't get diarrhea, yes?" (Julia, Health Center Nurse)*

* * *

> *"...in the beginning, this was declared a catastrophe or an epidemiological disaster, and this is the Disaster Unit, so, we took on (...) the logistics of all the supplies." (Alfonso, Government Physician)*

Subjects think about cholera along two parallel and conjoined tracks: cholera is a series of disease features (diarrhea, preventability, catastrophic effects), but it is also a set of behaviors (hygiene, logistics, disaster units). In their conversation, subjects present us interpretation of both aspects of the epidemic. Unlike a formal "textbook" definition, this account is not formally elaborated and explicitly articulated. Rather, it emanates from their practice, and illustrates only that parcel of reality to which they find

themselves attached. Not surprisingly, for example, for the director of a Disaster Unit, cholera was mainly relevant as a disaster. In consequence, understanding these accounts means understanding the subject's action. Similarly, if we wish to understand the accounts subject's make of their cholera experience, we need to recognize the nature of their practices. Let's explore this idea further:

> I am interviewing Hilda at the front desk of the Health Center. She is a short, jovial woman in her early fifties. We are surrounded by hundreds and hundreds of manila folders holding case records in open files. I ask her about the record-keeping for cholera patients
>
> *Hilda: "We have a separate form we were given by the Area."*[2]
>
> *Felix: "Oh yes, I was told..."*
>
> *Hilda: "It's filled out separately with all the data, its filled thus, like the cholera, dengue, tuberculosis..."*
>
> *Felix: "This was given beside..."*
>
> *Hilda: "Separate, these are separate cases." (Hilda, Health Center Administrative)*

For Hilda cholera means a particular set of practices, in the filling out of forms that makes up her work, her everyday activity. It is the shape of that activity that also structures the shape of cholera for her. Most instances of disease are recorded on a standardized health record form. However, cholera, like dengue and tuberculosis, is recorded on a different record. As she has a separate form, so she also has a separate disease to deal with. In other words, it is the framework of activity that sets the limits within which Hilda thinks about cholera. For the same reason, and in contrast with Hilda, a nurse talks about cholera in terms of its relationship to other gastro-intestinal diseases, due to the common features in their treatment, while a management specialist in Washington does so in terms of research protocols:

> *"When he did this study, he didn't have patients with cholera to observe, but he posed the question, 'Are all the right things being done? Do the clinicians do the right*

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[2]The Ministry of Health is organized functionally and geographically as follows. Under the political level (The Minister of Health and two Vice-Ministers) there is an executive level, the Director General of Health Services, who relates directly with 24 Areas, each led by an Area Director. These in turn have control over a number of Health Districts, each centered on a Health Center, such as the one studied, including in some cases hospitals. In turn, each Health District encompasses a number of Health Posts.

things, ask the right questions, do they have the right supplies to treat cholera?' Even without cholera patients, I think you can draw a lot of conclusions. It would be even more relevant if you had cholera patients, but we didn't have that." (Jack, Agency Physician)

For Jack, the practical constraints of research on diarrhea established both the limits and the possibilities of the cholera experience. On the basis of his practice (research on diarrhea), Jack could locate cholera within a conceptual framework. On the basis of that same practice he could transcend the limits of the event – a specific case or outbreak of cholera – to learn about cholera without it being present. However, the issue goes deeper than the simple relation between action and meaning, because together with the regularity of this relation, we have a diversity of contexts. The question then is, how does the social construction of cholera in these different organizational contexts vary, and what does this tell us about the contexts?

In the Health Center practice is made up, for the most, of care-giving activities. Personnel divide their time between outpatient and inpatient care, and outreach work. Their experience with cholera is one of first-hand involvement with cholera patients. When they speak about cholera, it is in terms of rehydration therapy, of excrement, of desperately sick patients lying at home, and of fearful neighbors. And this is not just the case of cholera, it is the fabric of their work: they deal every day with the material of disease in contexts of poverty. Let us return to the example of Hilda and note what she is talking about. For Hilda and her peers, cholera is a matter of actual illness and the provision of health care. Thus, the distinction is made between cholera, as an "unusual" disease, and more usual ailments. In its unusual nature it shares a category with such problems as tuberculosis and dengue, as opposed to childhood diarrhea or respiratory infections. This is a difference built not on frequency or severity, but rather on the peculiarity of measures taken for direct care and recording of the "case."

Whereas for personnel in the health center differences and similarities are established along lines of the routine or non-routine quality of services, for subjects in the national context cholera is a policy issue. For them, practice is dealing with policy management, and this means thinking and talking about cholera in terms of the policy categories available. Let us return to a previous quote:

"...in the beginning, this was declared a catastrophe or an epidemiological disaster, and this is the Disaster Unit, so, we took on, so to say, the logistics of all the supplies." (Alfonso, Government Physician)

One of the expected roles of national government bureaucracy is dealing with emergencies: it is a recognized field of policy. Agents, in making sense initially of cholera, placed it in this readily available, firmly institutionalized category. A similar process went on in the international context, where agents also drew on the institutionalized policy category of "crisis management" when interpreting cholera. Both international and national bureaucrats work with policy, and so view their world in a consequent manner. As a result, like subjects in the local context, international and national bureaucrats also talk about cholera within disease categories. However, while for the local health care provider these are categories constructed around features of the diseases' individual-level treatment, for the bureaucrats they are categories induced by policy considerations:

> *"...in practical terms, what our project has done is take the amount of funds that we have, which amounts to a few hundred thousand dollars, and have provided the same kind of technical assistance that we would do in other areas, like, acute respiratory infections or some other health care field." (Jack, Agency Physician)*

As a result, although everybody's work comprises both the manipulation of materials and of concepts, for local care givers the emphasis is on the materials of cholera, while for the bureaucrats it is upon the redefinition of concepts.

At the same time, there are also differences between international and national organizations. Bureaucrats within the national context are strictly obliged to address any issues that arise within a given geographical space and only within that space. They have a significant stake in the outcomes of any actions that may derive from their action. In contrast, international bureaucrats enjoy a somewhat greater flexibility in dealing with the problems they address. Rather than geography, it is the disciplinary nature of issues that draws their attention.

Several features characterize the relation between action and the interpretation of cholera. First, the mutual dependence of practice and interpretations is modulated by control: the limits of the meaning of cholera are placed by that which our action can achieve. As a result, a first level of structure is constructed in agents' experience by the fact that some things are within their control, while others are outside it. As gains or losses of control are experienced, so the subject's understanding of cholera changes:

"...[In the] community, many see [cholera] as a habitual part of their life. Getting sick is part of (...) their everyday situation, yes? Part of their life, so they see it as normal, then they don't worry, they don't practice." (Irma, Government Journalist)

• • •

"No, look, the cholera, at first it was a mortal disease, at least so I thought, I had that experience. Well, I said, when the cholera comes I go, because it's mortal, I die and I don't want to die, I have children, but no (...) nowadays there's cholera there [in the cholera treatment unit], I go inside and almost sit by him, because I know it won't kill me, if I take care not to ingest the germ, and so I have explained to the people." (Hilda, Health Center Administrator)

This experience of control can be derived from the appreciation that changes in behavior have brought about survival, as in the second example, from (probably stereotypical) characterizations of groups at risk, or from specific information or bodies of knowledge. In any of these cases, the outcome is similar: the change in the subjective experience of control is accompanied by a change in the meaning of the disease. The mortal disease is mortal no longer, and the epidemic becomes just another moment in everyday life.

Second, the interpretation of cholera is very real for the agents. Whatever its terms may be, it will go on to shape the subjects' future practice. As pointed out before, national bureaucracies have high stakes in the outcome of cholera related-action, and this makes them particularly sensitive to changes in interpretation that may expand or decrease the extent of the problem:

"[By notifying all suspected cases of cholera] Peru gave evidence of being very serious in the management of its statistics and obligatory notification. However, on the other hand, it suffered the consequences, because all the world, seeing these statistics, it struck them that the cholera problem was so big, that everything coming from there was contaminated. And evidently it affected their economy. It affected tourism, food export, a series of things, no?" (Erich, Agency Engineer)

At the same time, however, agents are conscious constructors of the cholera event. They act strategically in articulating the epidemic within their wider understanding of affairs at hand. I will end this section by underlining a notion that is crucial to that strategic articulation of cholera and its contexts: The social construction of cholera is a process, not a product, and as such is constantly changing:

Felix: "(...) have you always dealt with it as diarrhea?"

Deborah: "Well, that was the idea at first, however, as it was a new disease here, (...) they held special training for cholera, at first. But, after a couple of months, they were trying already to include it within the national diarrheal disease control program." (Deborah, Mission Sociologist)

• • •

"...so, the emergency, as such, is gone. We've talked that cholera move into the Diarrhea Program, that they should not change structure,...so, this is here to stay, it is a diarrheal disease, no longer a program, now it is a normal diarrheal disease control program, it is an endemic, it's staying." (Alfonso, Government Physician)

There is a very strong sense among the subjects that cholera has evolved, it has *become* a part of the Guatemalan scene.

The Cognitive Bases of Social Construction: Causal models and cholera

Social constructs are not abstract products of thought, rather, they are sets of meanings that fit into a larger framework, a normative web of meaning out of which agents make sense of the world. The subjects in the different organizational contexts did not somehow, suddenly decide to think and talk about cholera in their various specific ways. Rather, these interpretations are to them the obvious consequences of their general understanding of how the world works.

In the previous section I illustrated some differences in these interpretations of cholera that could be traced to conditional factors in the various contexts. I pointed out that the way in which cholera was shaped by agents depended on their proximity or distance to the material aspects of the clinical treatment of cholera. Models of causality are a further influence on the agent's interpretation of cholera. By models of causality I am referring to the complexes of technical and ideological explanations through which subjects account for the relations between phenomena (Cf. Oppenheimer, 1992). In talking about cholera, subjects made use of arguments that may be broadly ordered along a continuum: At one end stand the bio-medical explanations that attribute the nature, dynamics and consequences of cholera to the biological interaction between *Vibrio cholerae* and *Homo sapiens*. At the other end we find accounts of cholera that refer to macrosocial and historical processes such as class relations or economic

development in explaining disease. Traditionally, in the realm of health the bio-medical position has been associated with the clinical professions, while the second approach has been related to members of the more "social science-oriented" public health disciplines.

In my research it became evident that all the persons involved, whatever their position, shared an understanding of cholera that involved three aspects: poverty and the social hardship associated to underdevelopment, *V. cholerae*, and contaminated water or food. However, the presence of these three common elements has two important implications. The first has to do with the means through which such similarity is developed. The second facet shows us the nature of the variety that is present, and what it means for our understanding of the subjects. I will discuss this issue first, then discuss in the next section a series of practices that ensure coincidence across contexts.

Subjects resort to a variety of explanations in accounting for cholera. First, there are the more or less strictly biomedical arguments that employ the dynamics of the bacteria species and their effects upon human organisms as their main causal argument.

> *Oscar: "I have a different hypothesis. I think some type of* Vibrio cholerae *had existed in America for a long time."*
>
> *Felix: "Why didn't it show up until now?"*
>
> *Oscar: "The thing is that there were differences between the virulence of the stock. The virulence of this virus makes the colonies increase, the virulence is a type of increase of the microorganism that is faster than the other, so, I think that there were many diarrheas; I think there existed Vibrio in some places, and it developed in the places where there was more diarrhea." (Oscar, Government Physician)*

"Sociological" accounts of causality construct their explanations by relating disease to structural elements of society.

> *"...this applies as much to cholera as to a thousand other things, of course, but in the case of cholera it is particularly evident, because it was strictly a non-medical problem, it is scarcely of medical character,..." (Manuel, Mission Journalist)*
>
> • • •
>
> *Felix: "Then, what should be done to face cholera, that is not being done?"*

Amparo: "Oh, God, I think the problem is economic, and who's going to solve it?"

Felix: "So what should be done is address economic problems?"

Amparo: "Yes, because if people had other means of work, well, they wouldn't do what they do, and also educate and all that, education..." (Amparo, Health Center Technician)

Finally, there are causal models that bring both the social and the biomedical together in their explanation of cholera, in one way or another linking the dynamics of the species to social conditions.

"Why now, I agree, why now! I think that it probably will always be a mystery, but my speculation would be that it's probably a combination of an evolution in the organism, that it's a new phenotype of cholera that's better adapted to conditions in the region, and that the environment has continued to evolve, that Latin America has an increasingly dense urban population, more and more people living in a fairly small area, so that my guess is that the environment for cholera has been moving in the direction that favors the epidemic." (Jack, Agency Physician)

First and foremost we must understand that these causal models are not strictly distributed along lines of organizational or professional affiliation. Rather, most subjects make use of all three types of explanations to a greater or lesser degree. The question then is, under what conditions do these varying explanations come into use? Once again, this brings us back to the relation between action and understanding. What we are seeing is how agents use established schemas or elements of these (the models of causality) in a selective manner when making sense of the different, and occasionally conflicting, layers of social reality which they themselves face.

On the one hand, subjects are embedded in a "structural" layer of ongoing practice. This is a framework of institutions that appear to them as relatively rigid and non-negotiable. For the case at hand this is predominantly the world of health care services. When engaging with that world, agents resort primarily to the rules that are realized in its biomedically oriented institutions. On the other hand, agents also move within a layer of normative, but somewhat more negotiable, prescriptions about health and disease. This is the world of concepts and theories – both analytical and pragmatic, in which practice is more explicitly developed through discourse. These two overlapping but not coextensive layers constitute the framework of practical experience of agents. However, the weight of one or another is also dependent upon the context in which each specific agent moves. To a degree, the clinical-normative continuum is

spread along the same dimensions as the clinical-policy divide. As a result, the limits of activity for subjects in the local context are established predominantly by the strictures of clinical practice, while national and international bureaucrats move in a world shaped more by the social than by the material of cholera.

This is illustrated by the subtly "off limits" nature that social explanations acquire in some of the accounts of local personnel, who evince a clear understanding of the socio-material complexities of health and disease even though they cannot impinge upon the breadth of these:

> *"Look, you are going to say I'm a communist,*[3] *but here there are so many things, really it is basically infrastructure, poverty factor. Just down here there are slums where there is absolutely nothing, so that for me, in two words I will condense what has to be done: education is one, and the other is infrastructure. If we manage to improve this in the country, the health status of the people will be much better." (Juan, Health Center Physician)*

Indeed, there is an overriding sense among subjects about the constrictive nature of clinical institutionality, so that agents move within a system of nested causal models that more or less correspond to the layering of conceptualization and practice that constitutes their everyday experience. As need be, the subjects "slide" between one level and the other, and the corresponding causal models, in making sense of the contradictory elements of their experience.

> *"...diseases are not biological entities, as we would like to think of them, they really are epidemiological, but also political and economic and social entities, and, if you see cholera in that context, (...) then you understand that it's a different disease from diarrhea, even if it's the same disease as diarrhea. Biologically it's [just] another kind of diarrhea, politically it's very different, and that has resulted in there being very different management approach to it, which we've never successfully linked." (Walter, Agency Physician)*

Having illustrated the variety of causal models, we need to explicate more directly what importance this has for the interpretation of the cholera epidemic that subjects make in their everyday practice. First, causality lies at the root of the identification of courses of action. For example, for International Agencies, cholera is predominantly "*...a public health entity, political economic, social entity,...*" (Walter,

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[3]As typical casualties of the Cold War, Guatemalans are burdened with an ideologized notion of "Communism" that makes the use of the word almost unclean

Agency Physician) a fact which shapes the types of efforts they will embark upon. We might in fact say that the agents in the international context only got involved in cholera crisis measures because they could be typified and dealt with under the existing category of "catastrophes." However, as soon as actual events permitted, their underlying causal assumptions, i.e., the social and political nature of cholera, surfaced, both in discourse and in practice, as in organization and finance. As a result, the "solution" to cholera is geared to address

> *"...the deficiencies that made possible the rise of the cholera epidemic. It is a long term circuit that goes through human resources development, institutional development, investment planning, translated as investment projects." (Rubén, Agency Physician)*

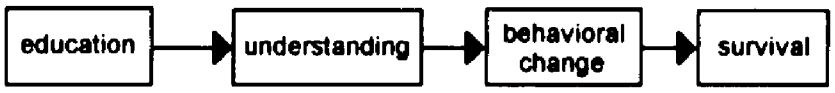
Second, causality is taken as the basis for the explanation of success or failure, in other words, for evaluation, whether formal or informal. Success, or its lack, is gauged against the elements and relations prescribed by a causal web:

> *"...I think [the people who] died were [the ones who] did not get there in time or arrived too late, and the foolish, the people who, even though they were educated at a given moment, didn't understand, or didn't want to understand. There is a culture clash, a clash of idiosyncrasies" (Alfonso, Government Physician)*

* * *

> *"...you start to see some change in rigid conceptions, as 'well, this community is the problem.' Why? 'Because they don't wash their hands, because they don't accept latrines, because they don't accept chlorine, I've done enough, I don't want to know anything, if they get sick, its their fault.'" (Pedro, Government Physician)*

The agents apply their causal models (in these examples as they concern the role of community involvement in prevention) to specific situations, and measure outcomes by the standard of the articulations prescribed in the model. For example, Alfonso above is measuring specific patterns of community behavior against a model that might be specified thus:



When survival is not forthcoming, his first explanation is to suggest that the elements and relations have not been properly articulated in practice (They *"didn't understand, or didn't want to understand"*). Only on second thoughts is the suggestion that the model

itself may be wanting insinuated in the notion of a "culture clash." However, this second theme is not developed by him more than as an illustration of the obstructions to what he considers appropriate responses:

> *"...we can't break into the circle, it is a circle of religious customs, it's as if you wanted to stop the Easter celebrations. That is so, and we aren't going to change." (Alfonso, Government Physician)*

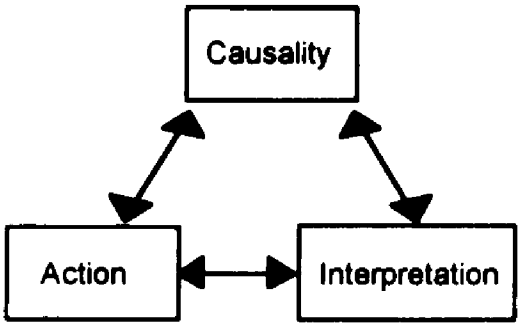
Finally, causality lies at the root of the use of cholera as an argument. The causal links subjects see leading to cholera suggest what other elements it may be related to:

> *"...it seemed logical to try (...) to make the point that the same process that basically cholera represents, kills many more children in a given day than cholera kills in a year, in any Latin American country, or any country in the world, for that matter." (Walter, Agency Physician)*

As a result, when agents from one context "argue" before agents from other contexts in favor of given practices, they resort to causal arguments:

> *"...the Ministry of Health went and analyzed, and told them: 'look gentlemen, what we have found is that after there is a party, the number of cases rises' (...)" (Pedro, Government Physician)*

In sum, causality, action (practices) and the interpretation of cholera form a triangle of mutually dependent and mutually influencing factors: causal models suggest ways in which to interpret the "issue." At the same time, causality orients action. Interpretation specifies causality and action concerning the event. Finally, action, particularly as it is sedimented in institutions, shapes the limits of the thinkable, both in terms of the causal accounts that can be resorted to, and in terms of the actual interpretation of the epidemic.



Generalizing Dominant Interpretations in Practice: Personnel training, community education and outreach

Agents in the different organizational contexts appear to construct their specific interpretations of cholera on the basis of general "blocks" of meaning concerning at least three aspects: a biological substrate (*V. cholerae*), unsanitary conditions, and underdevelopment. It is easy to state that this is due to the presence of a "hegemonic" model of health and disease pervading Western culture; however, we must validate this theoretically driven assertion in some way.

Much of organizational behavior is institutionalized, that is, the result of taken for granted normative and explicative patterns built through repeated action. A large part of this institutionality derives from action itself, especially as it becomes transmitted through time and space from some agents to others (Berger & Luckman, 1966). We tend to think about this transmission as something that happens within a homogenous context, among functionally equivalent agents: people constructing institutional environments in their interaction with peers. In this view, social structure tends to be seen as a progressive nesting of homogenous contexts, giving rise to the metaphor of "levels" within and between organizations. I would like to suggest that this perspective is confusing, because it may lead us to assume that individuals interact within social "units," but that "above" that "level" it is the units themselves that interact with each other. However, it is always individuals that are interacting, and so we must think about the processes of institutionalization that occur across organizational units as essentially the same as those happening within the units.

This discussion becomes relevant when we attempt to understand how the general elements of the interpretation of the cholera epidemic, and the causal models underlying it, can end up being similar all the way from Washington, D.C. to a poor neighborhood sitting on the edge of Guatemala City.

> Juan is a physician at the Health Center. Friendly and candid, he was willing to talk to me even before I had explained myself after the misunderstanding about my role in the Health Center. I ask him how "it all started for him."
>
> *"Well, the truth is, if my memory doesn't fail me three or four years ago we started seeing the reappearance of cholera. Then we started having some type of retraining, to see what the disease was really about..." (Juan, Health Center Physician)*

Cholera appeared in Guatemala seven months after it first showed up in Peru and only came to public attention as a major problem after a year. Like other Latin American countries, Guatemala was therefore able to take some precautionary measures in the expectation that cholera would eventually have to be dealt with in the country. As Juan describes, training was part of these preliminary measures. From the subject's perspective, this is a non-problematic issue. Training is a part of everyday life in health care organizations, and particularly in the medical profession. Yet, there are interesting lessons to be gleaned by delving more deeply into this apparently straightforward phenomenon. However, before doing so, I will present two further exhibits that illustrate the same process from the vantage point of the other two organizational contexts studied.

> *"This program has been sustained somehow and been complemented with support from UNICEF, who have given us technical advice on communications, and PAHO, who also helped us a lot. People were trained, education methodologies were transferred, the Areas have been continuously supported..." (Irma, Government Journalist)*

* * *

> *"So, the first thing was to collect as much scientific information about the topic as possible and distribute and diffuse it widely. This information was taken, through the country missions, to all the Ministries and Social Security entities, then in a second stage it was taken by extension to all health personnel and to all the population. (...) After this work, the personnel and the population in the American continent had no doubt left about what cholera was, what it meant for their health, how it affected people, how it was transmitted, and how it could be avoided." (Edgar, Agency Physician)*

The picture that emerges from this taken-for-granted process of technical support is one in which there is a distinct flow of norms from the "centers" to the "peripheries:" agencies in the international context tell people in the national context what cholera is, and they in turn train the personnel in the services. This centrifugal process runs along channels already provided by the institutionality of continuous education in health care. As a result, we observe a *de facto* displacement of potential local, practice-derived interpretations of the event by normatively driven and bureaucratically imposed formal instructions. Indeed, we might say that for most personnel cholera started, not with a case of cholera, but rather with retraining. The stage for the epidemic was set, not by *Vibrio cholerae*, but by health managers in the national and international contexts. By the time care givers at the grass roots level met

their first case of cholera, they had already relatively specific expectations of what the disease was, and as such would direct their attention to the aspects featured most significantly in the "paradigmatic" explication of cholera.

Note that this discussion does not imply a necessary value judgment. It might well be that the centralized specification of the nature of the issue and the response to it is an efficient and efficacious way of dealing with the practical implications of cholera. Indeed, institutionalized routine solutions make action more successful:

> *"...if our lethality is not so high, it is due to the fact that we have been living with diarrhea, that's the truth. From the time we are in the hospitals as students, we are seeing diarrhea every day and learning how to rehydrate people every day,..." (Julio, Government Physician)*

However, the ongoing process of centralization remains, and the question it raises is, could things be different? The acceptance of centralized training is coupled to the assumption that local personnel, whether for reasons of personal or of institutional history, are not capable of defining their situation in appropriate ways.

The process, however, does not end within the formal limits of organizations, rather, it has important implications for the relations between bureaucracies and the community. I will discuss these relations as they appear in community education and outreach activity.

Community education is a pervasive facet of health services in Third-World countries. In the case of cholera in Guatemala it happens in a variety of contexts, the most obvious of which is the direct patient-caregiver interaction. However, it is also formalized in pre-consultation and post-consultation talks for patients in services, and in activities involving personnel and community, such as talks for neighborhood committees or work with schoolchildren. The task of actually "delivering the messages" is carried out, for the most, by nursing staff and nurse assistants. However, social workers, physicians, and a variety of voluntary community personnel also take part.

Furthermore, education is a major part of health service activities, and in this respect cholera has been no exception. Organizations in all the contexts exhibit a significant interest in educational activities. Indeed, as one interviewee, a sanitary engineer, pointed out:

"...there exists still (...) an exaggerated preoccupation, now after three years of cholera, with the 'education' part. I put this education in inverted commas, because the term means a lot more than we are talking about here. (...) With this, evidently I am not saying that it is not important, far be it from me to say such a thing, it is fundamental, because a good water supply system is of no use if people don't handle the water properly. But, on the other side, only orientation with no system is no good, right?" (Erich, Agency Engineer).

There are good reasons why organizations pursue health education so assiduously. For one thing, it is relatively cheap. The main resource needed are people, and with adequate methodologies effects can be multiplied without undue expense. For another, education is easier to perform than any attempt to introduce changes in sanitary infrastructure. An idea of the relative challenges can be had if we think about what it would mean to set up a water pipeline for a hundred families, as compared to simply explaining to the heads of these same families how to boil the water they already have! As a result, health education has figured very largely among the efforts of organizations in all three of the contexts studied:

"...so the emphasis in these latter times has been, the country now has set up a special office to fight against cholera and it is being promoted through the visit of the representatives of this Agency to all the Areas of the country, through a gigantic promotional effort, it is being intended that all knowledge acquired, the experience collected in the country itself, in neighboring countries, might be turned to the benefit of preventive and control activities." (Andrés, Mission Physician)

The interesting thing, however, is to note that these efforts follow a pattern of centralization that is similar to that evinced by intra-organizational training. This is the case even when community-induced, or at least decentralized education is advocated.

"I think the community must become integrated, and to facilitate that we must educate them more, in the positive sense. Explain to them why they must avoid wakes with food, that it's not that the deceased is detestable but rather, that the same people that manipulated the deceased, at least they or the relatives don't hand out the food, or that only hot food be given, really hot food, and that people wash up properly, so that they understand that they are not being belittled, nor are their belongings going to be burned, so that we have to recognize that there are barriers that may be modified with education. However this work is not at the national level, but rather at the local level..." (Leonel, Mission Physician)

* * *

"...round '90, '91, it was asked that educational materials be made for cholera control. So everyone made materials. All the way from the Mothers' Club in Chupol to the football team in Amatitlán, and including INGUAT [the National Tourist Commission] [laughter], even the telephone company. Everyone made educational materials, which is

positive, very good, excellent. The only problem is, they all gave different messages. So, what was the alternative? The alternative was to say, 'don't make messages, don't make materials.' But that wasn't the [solution]. The alternative was to have a very high level commission, very high level, not in the Ministry of Health. What the Ministry did was stop production (...) and try to ensure that everybody did what they said, no? What should have been done was set up a very high level commission which could bring together all these people, but with a large political power, that is, somebody who could call up the president of the telephone company (...) 'Excellent materials you have made, but a problem, the messages are inadequate. These are the messages recommended by the country, the Ministry of Health recommends these messages.' OK?" (Héctor, Mission Physician)

The range of possible strategies has been framed by the assumption that knowledge should be organized around the perspectives of organizations at the center, not of the community. This is made clearer when criticisms are voiced about the status quo:

Oscar: "[You mean] activities to control the cholera?"

Felix: "Yes, (...) what should be done, as far as you're concerned?"

Oscar: "A total decentralization of decisions for the promotion of health education, the respect for the notions of cultural groups in Guatemala, with respect to their culture. So, begin a two-way process of education, (...). This is to say, I believe the only way to solve the problem is that, it is a mutual respect,..." (Oscar, Government Physician)

In sum, we can think of the process of community education as a means through which central hegemony is ensured, not by coercion, but rather through the anticipatory specification, by powerful agents, of the nature of the situation. Achieving this is not the self-evident result of hierarchy, but rather the product of networks of micro-interactions between specific agents. These micro-interactions are specified along lines, on the one hand, of institutions such as the authority of expert knowledge or the scope of legitimate intervention (whereas local personnel can only act legitimately within the perimeter of its assigned community, national or international bureaucrats have a much wider field of action). On the other hand, powerful agents realize their power through the broader knowledge and resource base constituting their scope of action.

Outreach activity by health services personnel is the final link in this chain of practice begun by training and education. For the most, we tend to think about organizations as coextensive with their material resources and especially with their

architectural assets. Public health has a long tradition of seeking out its charges beyond these limits through outreach. Specifically, I am using the term outreach to identify the practices that expand the limits of the formal organizations into the community. In the context of outreach, health care personnel reproduce activities normally performed within their services in the home of their subjects or in other community settings. Community education and health care concerning cholera were also performed in this outreach setting.

> *"...immediately we went and visited the home of the patients, and we saw that the conditions of the house [and] of the patient were (...) pretty bad, they lived in cramped quarters. We gave them their instructions, that was the first day. The second day in the morning we did a blocking, at all levels, all around the neighborhood (...), we delivered flyers, to warn people that the measures of hygiene were important."(Julia, Health Center Nurse)*

Again, building on the institutionality of outreach as a way of doing things, the organizations attempted to preclude, not only the spread of the disease, but also, perhaps unwittingly, the spread of community-based interpretations. The significance of this event becomes clearer when we compare it to the spread of panic concerning cholera in 19th Century Europe. As I will discuss extensively in chapter VI, at that time and in that context the state could not rely on bureaucracies and outreach as institutionalized means to avoid the spread of interpretations of cholera as a fearsome event.

Contrasting Contexts and Varying Interpretations of Cholera

In the previous section I noted that, across contexts, agents share common elements of understanding that they incorporate into their interpretations of the cholera epidemic. There I showed how powerful agents successfully spread their approaches to cholera as hegemonic models through the institutionalized channels of personnel training, community education and outreach. In this section I return to the discussion of elements of variety among contexts by suggesting that the variation in the way agents in different organizational contexts see cholera may be thought of as modulations of the values of the elements of the dominant model.

A key plane along which variation is manifest concerns the distance between agents and the core of clinical-medical knowledge that drives the health sector. Thus

non-medical personnel are willing to contest the medical account of cholera, granting in this that the disease is more than an objectively straightforward biological process

> *"You know, I think that really there have always been diarrheal diseases, but I think there was an important aspect: financial aid. So, besides that, according to the studies, research and all that, analyses of tests, well, they must have seen the corresponding bacterium, and that made the word cholera come up,..." (Sonia, Health Center Caseworker)*

* * *

> *"...sometimes I think its just things of the government, that cholera has always existed, and maybe for convenience's sake it's only now that they've started taking samples of dough, a whole lot of things, where they have found cholera, I think it has always been there." (Amparo, Health Center Technician)*

Evidently the "official" scientific account of cholera has only a relatively tenuous hold upon the imaginations of local health personnel. But this is not the only case. Professionals in other contexts and physicians with backgrounds outside the core clinical specialties also contest the dominant account:

> *Rick:" Well, either way you looked at it, I think the biggest problem from my perspective as an engineer, (...) is that cholera policy (...) [and] programs have been largely controlled and implemented by the medical community in these countries, with all due respect."*
>
> *Felix: "No problem, don't worry."*
>
> *Rick: "And they have focused on this, and that's very short-term, it's very costly and very short-term, and it's not a sustainable effort, it's not really going to prevent the next cholera outbreak." (Rick, Agency Engineer)*

* * *

> *"I don't know if you think the same as I do, because that has existed always, what happens is that it hadn't been detected, that's my way of thinking. (...) here we have always had patients in shock, with severe dehydration and conditions of diarrhea as severe as those of cholera,..." (Beatriz, Health Center Physician)*

The counterpart to this distance from the "official" core is a certain proximity to the community. In a way, local personnel and certain subjects in positions that place them in contact with the community appear more willing to admit non-biomedical interpretations of cholera. Thus, among the national personnel, two individuals who

were communications specialists and a physician/anthropologist, acted as "advocates" for a community-based interpretation of cholera:

> *"Because we know the problem with diarrhea has been serious, and there were other much more serious diarrheal problems, and when you see elderly people, what do they say? 'Man, this has always been around!'" (Irma, Government Journalist)*

From that perspective, cholera appears more as a contextualized phenomenon – severely ill people in specific communities – than as an element within a category of policy or within a medical typology. Indeed, the community-based interpretation, as reflected in the speech of these subjects, evinces a syncretism of medical and "common-sense" elements that supports the idea that people enact reality and construct meaning out of whatever they have at hand, including science:

> *"The community see it already as a matter of living with cholera (...) if you ask them 'Well* doña fulana, *and what do you say about the cholera?' 'Well, look, doctor, I've seen that if I look after my children and cover everything up, I'll be all right, I'll never get sick,' but other people say 'But how are we not going to eat on the street, if we are poor people, we have to eat on the street, but we'll avoid looking at the kitchens." (Hilda, Health Center Administrative).*

Notice especially how science-based prescriptions concerning the avoidance of risky street food vendors are juxtaposed to the quaint idea that not looking at the kitchens will keep people from suffering the effects of the disease.

Finally, as suggested at the beginning of this chapter, there are variations in the way subjects see cholera that derive from the nature and conditions of the actual work that is performed in organizations. A first aspect of this concerns the ongoing purposes and activities of the organization itself. The way subjects think and talk about cholera expresses, in a situated manner, the relation between organizational purposes and activities and the specific event under discussion. So for example, individuals in an organization that is explicitly focused upon international economic relations frequently resort to the imagery of economics in accounting for cholera:

> *"...and in order to develop some meaningful data that give us talking points around that cost, and how that cost can be reduced by increasing the use of appropriate case management, which is appropriate case management for dehydrating diarrhea in general, [and which] can help identify that problem systematically, address that problem and also, try to build the bridge back between the cholera control activities and the CDD [childhood diarrheal diseases] activities, recognizing that the answer lies in CDD, and since the divorce took place early, we are hoping for a reconciliation of sorts, based on,*

not case fatality, but based on economics, which is where most ministers can [act] (...). anyway." (Walter, Agency Physician)

Meanwhile, interviewees from an agency that makes social development an explicit element of its creed frequently resort to a different rhetoric:

"Well, I think, as I told you before, that it is a social problem, no? So, this is very much related to (...) the level of development. (...) the first and most clear one is this, no? You can't compare Costa Rica with Bolivia or with Suriname, no? So this is a thing with different characteristics. The other, the level of political development also varies, and in this sense the responses that are seen are also different, no?" (Paulo, Agency Physician)

This does not mean that one agency only deals with "the social" while the other one deals exclusively with "the economic." Indeed, subjects in both organizations continually resort to the relation between economic and social development. However, for one organization the axis of the relation – the "independent variable," if you will – is social development, while for the other it is economics.

A further determinant of the interpretation of cholera in each context concerns the resource base available to organizations. A critical concern for the public health sector in Guatemala, and particularly for the Ministry of Health, is its chronic inability to accumulate and mobilize resources, which translates into a difficulty in getting things done. In this context, subjects attempt to articulate cholera as an intersectorial problem, which serves as a way to involve resources from other organizations and the community in the pursuit of these subjects' organizational objectives:

"...so they should say, 'OK, we as the municipality can work on this, this, and this,' so they are getting a commitment from the community, that it not be just the Ministry's personnel, the health sector that have all the load, because we have to share the cholera problem. Really the problem of cholera (...) is not just the health personnel's problem, it's everybody's." (Julio, Government Physician)

Finally, as I pointed out before, the different organizational contexts vary fundamentally by the scope of their resource and knowledge bases, and of the legitimate limits to their action. As a result, agents' perspectives on cholera vary along dimensions of time and space. In terms of space, for subjects in the international context cholera is an event spanning multiple countries or environments in an essentially comparable fashion. Meanwhile, for people in the local context, and to a lesser degree in the national context, cholera is a situated phenomenon, and events beyond the immediate context are relevant only as they reflect upon that immediacy.

In terms of time, the history of events also varies in meaning according to the scope of the field relevant to each specific context. At one end are accounts that use history mainly as a source of anecdotal highlights on the discussion:

> *"Look, in Guatemala it's a hundred years since there was cholera, the wife of I don't know what president died..." (María, Mission Chemist)*

At the other end are accounts in which the explanation of cholera as disease and response occupy a more fundamental, structural position:

> *"...first, the therapy for dehydrating diarrhea that we all use [as a] base for our CDD [childhood diarrheal disease] programs, was derived from cholera, yet people seem to have forgotten that, and then it seems that cholera's been rediscovered as the prototype watery diarrhea,..." (Walter, Agency Physician)*

Trends in the Interpretation of Cholera

The picture of cholera painted up to this point illustrates both the commonalties and the variations that arise from the internal dynamics of the different organizational contexts and from their mutual interaction. However, there is a crucial piece missing in this picture. I have started this research report by appealing to the notion that social reality is constructed. However, I have also drawn upon the idea that it is an ongoing, never final, process of structuration. The picture of cholera needs, then, to be enriched with a sense of change and movement. I will discuss in this section what trends are apparent in the data.

Building upon the extended spread of the agent of cholera in food and water and its adaptation to year-round survival in Guatemala, two fundamental trends characterize the social construction of the disease in that same country. The first of these trends refers specifically to the "issue" as a disease, the other to people's behavior. Concerning the "issue," there is a clear tendency to rethink cholera in terms of diarrhea rather than as a pathological entity in its own right. Concerning the behavior of agents, besides the changes in activity implied in dealing with "diarrhea" rather than with an epidemiological crisis, there is a recognized trend, at least in the national and local contexts, toward "lowering the guard," that is, toward a complex of behavior and understanding that involves a loss of fear of the disease, and a diminished preparedness to deal with its practical implications.

Rethinking cholera as diarrhea does not just imply relabeling the process. Rather, it means reconstituting its relations to the overall pattern of health care policy and practice, in fact normalizing it as just *"one more health problem."*

> *"...we have arrived at the decision to share responsibility for addressing cholera and, why not say so, integrate it as one more health problem, and in the context, once again, of environmental sanitation and diarrheal diseases. And cholera can be (...) an index of a larger problem, (...) not just have the eradication of cholera as the end of our activities, without taking sanitation or diarrhea into account; instead we are putting it within that context, and we are trying to direct it toward the factors that condition and determine the problem, more than simply toward an eradication of the problem..." (Pedro, Government Physician)*

In analyzing the trend as presented in the previous quotation, it becomes especially clear that "issue" and "response" are two inextricably linked facets of the same process. Making an analytical distinction, however, it is possible to identify that the subjects are rethinking the "objectivity" of the disease in terms of "endemicity." For them, the process that is driving change from within the epidemiological dynamics of the disease is the fact that it is becoming endemic:

> *"No, I think that what is happening in this moment, is that it is becoming institutionalized, the concept of cholera as an endemic, that is what's happening,..." (Oscar, Government Physician)*

From the perspective of local personnel, the notion of endemicity acquires a less "expert" flavor. For them it is not so much a matter of recognizing a typical pattern in the "natural history" of the disease as described by epidemiology, but rather of resigning oneself to a further aspect of the inevitable hardships of life:

> *"Well, I think that it's going to go on the same as we are, because with all these street vendors, it is the people's everyday life, they won't be able to avoid it, and they won't really take into account all the measures they should..." (Amparo, Health Center Technician)*

"Lowering the guard" becomes evident, as pointed out above, in the loss of fear of agents with respect to the cholera, coupled to a decrease in cholera preparedness. The dynamics of this process operate as a mutually reinforcing interaction between community and health personnel:

> *"...the communities faced the problem, they got to know it and saw that it didn't kill as violently as had been supposed, then they lost fear, and in losing fear their level of cooperation diminished; and then also each one was left working on their own, so the*

interest of personnel in keeping the community motivated and participating also shrank..."
(Tito, Mission Physician)

However, "lowering the guard" is a trend in the national and local contexts, and is not evident in the accounts of subjects in the international context about their own experience. For them changes in behavior are interpreted within a framework of control, rather than of loss of control. Their "response" to the shift from epidemic to endemic is described as active, not passive, tending toward objectives of intersectoriality, nonspecificity and proactivity. Intersectoriality, as in the case of the national context, concerns the involvement of wider sets of agents in addressing cholera. Non-specificity describes the idea that cholera should be dealt with by generic organizations, rather than by specific cholera agencies. Finally, proactivity refers to a change in attitude with relation to cholera: as time passes, International Agencies increasingly attempt to seek out cholera on their own terms, rather than adopt the expectant stance they had at the beginning of the epidemic.

This difference between organizations passively lowering their guard in national and local contexts and organizations actively addressing cholera in the international context may be associated to the dynamics described above concerning the origin and spread of hegemonic models of interpretation. In the overall picture, it is the International Agents that can most easily manipulate the categories within which they place cholera. As a result, they can establish for themselves a clear sense of purpose and direction with respect to cholera. In a way, it is as if, on the basis of a policy categorization that includes the categories of "epidemiological crisis" and of "diarrheal disease," agents said to themselves: "Now we are in the 'crisis' category;" "now we are moving from the crisis category into the 'diarrheal disease' category;" and "now we are in the diarrheal disease category."

By contrast, local agents, and to a degree national agents, are tied to the immediacy of the problem: Their perception of events is much more tightly constrained by the specifics of the spread of the disease and wider social responses beyond the formal organizational limits. This generates dissonances that become evident at the interfaces between the contexts:

> Alfonso is an epidemiologist. He is in charge of a disaster unit in the Ministry of Health. We are talking about trends in the statistics of cholera. He is not convinced by the data, which show cholera diminishing, but an increase in diarrheal diseases in general

> *"...it seems to me that the data are not too real, because the incidence curve is deteriorating and diminishing. There's some slack somewhere there, that we have not found, and I would believe in a hypothesis, that they are not reporting, or simply they are all going to the diarrhea category." (Alfonso, Government Physician)*

What Alfonso makes evident here is that people in local health services are shifting cholera from the "unusual disease" to the "usual disease" category, without organizations in the national contexts being formally conscious of this, nor sanctioning it overtly. Thus, there is an expectation in the national context that data will be reported from within a "crisis" interpretation of cholera; however, the practical framework of action has changed to one of "normality." This constitutes an ambiguous situation in which national agencies want people to think about cholera as a diarrhea, but at the same time want it reported statistically *as cholera*.

A further example is provided at the international-national interface by the persistence of the National Cholera Commission as a specific bureaucratic unit despite the decreasing willingness of International Agencies to fund such cholera-specific entities. In sum, as the interpretation of the cholera epidemic changes at the center of the network, the peripheries get caught up in a conflict between changing normative interpretations and persistent local phenomena. In the following chapter I will explore one of the consequences of this conflict, namely, the need for the negotiation of contrasting interpretations of cholera.

V.
The Articulation of Cholera to the Agenda

Introduction

The meaning of cholera for the subjects is changing through time. In this chapter I will discuss a specific set of strategies that agents pursue concerning this change, and how these strategies relate to agents' everyday life. This theme I have labeled as "articulating cholera to the agenda" of organizations. By agenda I mean here a pattern of purpose and action that characterizes the behavior of organizational agents. It is an articulation of cholera to that agenda because agents restrict the potentially multiple meanings inherent in the social phenomenon of cholera, not only so that the event fits more directly into the limited set of meanings that constitute their specific social experience, but also so that it actively promotes that particular interpretation. As time passes and agents re-assert their agendas, cholera becomes increasingly normalized. The catastrophic and unusual connotations of its first appearance increasingly recede into the background as it becomes just "one more disease."

In the process of articulating cholera to the agenda I distinguish three phases. The first phase concerns focusing on cholera. Organizations that had previously directed their attention to other issues reorient themselves in order to perceive cholera and to deal with it more directly. The second phase is the crisis management phase. As the problem refuses to disappear, agents increasingly interpret cholera in terms of categories that allow them to deal with it as a crisis. Finally, as the event is brought under control, organizations begin to re-assert their agendas, and consequently to rearticulate the epidemic in terms of these agendas. At the same time they use cholera as an opportunity to advance their own interests in relation to other organizations. Significantly, however, this is not a one-way process. In the act of reinterpreting cholera in terms of their own interest, the organizations' agendas are modified by the presence of this new element in the constellation of their social experience. Indeed, the agenda is

itself a dynamic process more than a static outcome, changing under the influence of the multiple and often conflicting pressures both within and outside the organization.

Before discussing the data, I must explain what I mean by "agenda." I am basing my usage of the word on the common-sense meaning of the term as a guide for a group discussion. The agenda in such a context is a summary of expectations about the progress of a meeting in two analytically distinct, although practically combined senses: Fist, it addresses the *contents* of the meeting: it specifies what topics will be touched upon. Second, it concerns the *form* of the event. The agenda tells participants in what order topics will be addressed, and by whom. In that way, the participants get subtle cues about the relative importance of the different issues and agents. Significantly, once the agenda has been set it usually constitutes a framework but not an issue for discussion. In fact, however, the form of the agenda does imply matters of substance. At the same time, this does not mean that the agenda is unchangeable, or that it has no alternatives or avenues for dissent, even institutionalized ones. That is, after all, the purpose of an "others" item in an agenda. However, by specifying a space for dissent, this is also subjected to the overarching rule of the agenda.

In the context of the research this discussion is important for the understanding of the institutions that frame action vis-à-vis cholera. What cholera *is*, and what action is taken depend not just on what agents want to do (their more or less explicit purposes), but on where they stand, what patterns of action they are already committed to. It is to this complex patterning of purpose *and* action that I am referring to as the "agenda."

The discussion in this section is organized as follows: First, I discuss the three phases involved in the process of articulating the organizational agenda with respect to cholera. Second, I discuss the actual practices in which this articulation is made evident. Finally, I consider the role of social and material resources in the process.

The Process of Articulation

In this section I discuss the data which suggest that the encounter between cholera and organizations in Guatemala has proceeded from an initial focusing upon

the issue, through a phase of crisis management, to a re-asserting of the organizational agendas and the reinterpretation of cholera to fit these agendas.

Phase 1: Focusing on cholera

Cholera, I have argued, is a socio-material process: the event agents call cholera combines elements of the biological interaction between two species in a material context with a variety of meanings that account for the features of that disease in the lives and minds of those who face it. In this complex it is difficult, if not useless, to decide what has causal priority, whether the biological interactions that precipitate individual disease or the social dynamics that set the stage for its development and subsequent interpretation. In any case, looking over a period of years we can say with certainty that what is there today, "cholera," was not present before. The process of assimilation of this new element into the socio-material reality of subjects can be usefully thought of as the interaction between a spotlight and a moving actor on a stage. At a given point in time cholera appeared at the margins of the agents' attention. At that point, cholera sat in relative darkness, competing for notice with patterns of action and purpose with which agents were already fully involved. Thus, cholera constituted a distraction for them, rather than a subject for legitimate address:

> Walter is a physician working in one of the International Agencies in Washington. Some years ago he worked in Guatemala. He is telling me about the experiences with his agency's missions [branch offices] in Latin America during the first year of the epidemic.
>
> *"Another complication was, that there wasn't substantial demand [to us] by the missions. (...) we thought that was partly in response to a couple of things. One, mission officers aren't specialists in the area. Health and population officers have a broad area in which they manage activities in health and population and nutrition, cholera is only one small part of that, and (...) there were other International Agencies (...) diving in immediately, and the Agency didn't always feel that it was the most urgent thing that it was facing, and that they should throw over their ongoing activities, (...), undertake a new activity which involved management, oversight by them, when they had things that they were already overseeing and they were probably fully committed to." (Walter, Agency Physician)*

As the quote shows, with respect to the ongoing pattern of action, cholera initially occupied a marginal position. This marginality can be thought of as the result of an interaction between a novel problem on the one hand, and pre-existing commitments to certain activities on the other. This interaction is mediated significantly by knowledge: either through training or experience subjects develop a body of

knowledge that they use in interpreting their context. Ongoing practices shape that knowledge in ways that can make the agent either more or less sensitive to a variety of challenges. In the case above the health officers lacked the specialized knowledge that would have allowed them to construct cholera, both as an issue and as concerns their responses, with ease. The alternative was to ignore the problem as far as was possible.

Phase 2: Managing the crisis

As the marginal event refused to go away, agents were increasingly obliged to deal with it directly. It is at this point that we can see the preexisting categories of interpretation coming into play, as agents, particularly in the international and national contexts, begin to think and talk about the event as an epidemiological emergency:

> *"...the Agency within its plan thought there would be two stages that would deal with the problem. One we considered an emergency phase, a second one we considered an investment phase. In the emergency phase we were interested in looking after the cases, avoiding deaths and limiting possible social and economic repercussions,..." (Paulo, Agency Physician)*

Indeed, the relation between cholera and other "natural" disasters or emergencies is established quite automatically in speech:

> César likes to talk. He is in his early sixties, and has told me he is about to retire. I suspect he is not too happy about it.
>
> *"Any moment you may import, anywhere it may have appeared, a microbial infection that may cause problems. [So you must have] the existing capability of official government mechanisms to deal with these situations, the flexibility to address them. (...) That's to say, we can't put a fire station [on each street], in case there are fires. So we have to have a fire station with some flexibility. And talking of fires, the U.S. is not free from them, in California, the fires there were in California. And now the rains..." (César, Agency Microbiologist)*

However, treating cholera as a crisis or an emergency does not necessarily imply lack of preparedness. Rather, what is at issue here is a choice of appropriate courses of behavior. By categorizing cholera as a crisis, agents allowed themselves the pursuit of specific precautionary and reactive patterns of behavior. The expeditious purchase and distribution of large amounts of oral rehydration salts, for example, depended on treating cholera as a disaster. The significance of this becomes clearer when we consider that the massive mobilization concerning oral rehydration salts had not been undertaken to deal with the effects of the chronic catastrophe of childhood

diarrhea – epidemiologically a more devastating disease than cholera – which would require a similar mobilization effort to be made on a regular basis.

Phase 3: Re-asserting the agenda

At an early stage in the epidemic the performance of crisis management measures came to occupy a large proportion of the attention of the organizations involved. However, a crisis is by definition a short-term event. As time passed, organizations started reassessing cholera in terms of their agendas, and reinterpreting the epidemic with respect to these same agendas:

> *"We are much more aware of the political and the operational and the programmatic (...) dimensions, and maybe we are in a better position to take on some of those second-generation issues that have to do with cost recovery, sustainability of activities, (...)" (Walter, Agency Physician).*

The specific considerations that shape ongoing work in organizations begin to work their way into the articulation of cholera's meaning. In this case the commitment to, and expertise in, international financing mechanisms is expressed in what Walter calls *"second-generation issues."* Again, the reasons for this can be found in the commitment of agents' resources and efforts to ongoing activities. Thus, there is an incentive to try to see cholera as a way to strengthen these commitments, rather than as a distraction or as an alternative course of action:

> *"...I mention it because in speaking with him, [we] identified the notion that we, (...) [and] other organizations have tried to use cholera as a way of reinforcing, strengthening the National Diarrheal Disease Control Programs, that we've all invested a lot of time and effort in building over these years, (...) and that it actually makes good sense,..." (Walter, Agency Physician)*

As a result, cholera and the organizations' agendas increasingly become connected to one another. This happens in one of two related ways. On the one hand, cholera can be incorporated as "evidence" demonstrating the significance of the agenda as already articulated:

> *"OK, you need first to understand in general that, [this] project's general mandate is trying to improve basic water and sanitation services, to improve health, a preventive health thing. So we saw the cholera epidemic as a manifestation of a collective inability to achieve that." (Rick, Agency Engineer)*

On the other hand, cholera can be used as an "argument" to promote the agenda among other agents:

> Edgar is telling me about the contents of a large, international program set up by his agency to address the water and sanitation problems that the agency considers lie at the root of the cholera problem. His agency has a tradition of developing and promoting community-based health care initiatives.
>
> *"One of the most important changes we are proposing to the countries, and which the countries have accepted, although not necessarily adopted with the necessary vigor, is to try to give more local autonomy." (Edgar, Agency Physician)*

However, the articulation of cholera and the agenda is not a straightforward process. Even when this articulation constitutes a reaffirmation of the organization's *status quo*, it also implies changes in behavior. As a result, linking cholera to the agenda depends on the limits of existing organizational infrastructure and may challenge institutionalized ways of doing things, a process in which organizations may undergo more or less traumatic experiences:

> Leonel is telling me about a visit he made with officials of the Ministry of Health to the local health services in a community that suffered serious outbreaks of cholera several years in a row.
>
> *"...*Joyabaj *repeated its bad experience with cholera in (...) 92-93, but in 94 they haven't had a problem (...), they've learnt, (...). I went to the evaluation in* Joyabaj, *so I saw this. This time there were no reprimands to the people there, but rather congratulations because additionally they presented a primary health care plan. Among them was Herbert Mayorga – he was in our class, at the Roosevelt [hospital] – he's been [in* Joyabaj*] for 7 years now. Although he and [the] others were only curative '[physicians],*[1] *because that is a hospital – they were interested, as you would expect, more on the therapeutic part – but they have few resources for operating or for admitting people into the hospital, and additionally they had the pressure of two years when [their superiors] came down hard on them because they had shown high mortality rates. So they organized themselves and presented a plan they are putting into practice, and he, as well as other physicians, coordinate groups and have the municipality parceled out, in order to go and offer primary health care, including the cholera prevention program." (Leonel, Mission Physician)*

Re-asserting the primacy of the agenda is a generalized phenomenon that responds to the rigidity inherent in institutionalized processes. Each organizational context is driven by a varying combination of factors. Among these we may count the

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[1] By "curative" the subject is making a distinction between physicians interested mainly in clinical care, as opposed to physicians with an inclination toward public health interventions.

"lowering the guard" phenomenon described in chapter IV, endogenous and exogenous limitations on resources, the systems of bureaucratic politics operating within each of the contexts, and the "natural history" of the disease.

The practical consequence of the articulation of cholera and the agendas is that the epidemic takes on a quality of "opportunity" for agents. One sense of this opportunity potential was discussed above as the possibility of using cholera either as evidence for, or as an argument about, an agenda. However, this is not the limit of the phenomenon. For one thing, the relation is not unidirectional: In relating cholera to their patterns of action and purpose, agents see these patterns changing as much as they are reinforced. As a result, for example, the relatively amorphous, somewhat fearsome event "cholera" was no longer the same for the subjects once it was translated into precise descriptions and prescriptions in the mass media. On the opposite side of the relation, ongoing outreach activities were also no longer strictly the same once they included cholera prevention among their instructions.

Furthermore, familiarity diminished the opportunity potential of cholera from the onset of the epidemic so that, at the same time as organizations increased their ability to "use" cholera, cholera became a less useful "instrument." As a result, there is a sense that cholera was not adequately exploited:

> *"...I'm not happy with what was done, I think the cholera threat could have been better used, so that Government could have gone a bit faster, for example, in the South Coast plantations; pressure there was only timidly applied on a few plantations to put in decent waste disposal services, because people were living like cats and dogs. This was a campaign that should have been pursued to a greater extent. The private agriculture sector, specifically in the South Coast, would have had to get things done, but they weren't going to do it of their own free will..." (Manuel, Mission Journalist)*

At the same time, however, these might be interpretations of opportunity that derive from expectations rather than from the actual workings of the contexts. In terms of getting things back to "normal," that is, of ensuring the preeminence of a curative, status-sustaining approach to disease, cholera does seem to have been used quite extensively and effectively.

Additionally, as the organizational agendas become more clearly articulated to cholera, the event is reinterpreted in terms of the expert knowledge that lies at the core of modern bureaucratic action. As a result, agents see themselves coming to terms with

cholera as they assert their relative strengths, that is, their technical expertise and the expert knowledge embedded in their organizations.

In the case of the International Agencies, such expert knowledge constitutes, besides money, their main product vis-à-vis national and local organizations. Whereas an organization such as the Health Center mostly offers its expertise directly embedded in actual clinical practices, International Agencies offer expert knowledge as such: what they produce and distribute is explicitly "advice." Thus, at the heart of the International Agencies' changing influence on the national context lies a change in the type of knowledge offered through training, going from "crisis management" strategies to "cholera-as-diarrhea" treatment strategies.

Further, the agents from the international context promote and legitimize attributions of success that are made on the basis of expert knowledge:

> *"And [success has come] where the country has given clear leadership to those people who have expertise in diarrheal diseases. [In] Perú, for example, (...) they appointed a czar, they appointed Saúl Galindo, probably the one who is most familiar with, and one of the largest proponents of, oral rehydration therapy." (Tom, Agency Physician)*

An important aspect of this expert knowledge is its controlling impetus. Embedded in expert knowledge is the idea of truth as unique: Consequently, there are "better" kinds of knowledge that must be followed by all. As a result of this, there emerges a standardizing trend that is evident in local, national and international contexts. It is particularly apparent in the international context, where expert knowledge is also most developed as a basis for work:

> *"...right now, if Agency "A" wants to put a loan into Guatemala they send a hired consultant down with a scope of work and with or without guidelines, that they may have, and he or she does her assessment, and says, 'This is what's needed.' Agency "B" sends another consultant, Agency "C" sends another and they come up with three different things that may or may not agree (...) but the first step is as to why. It first depends on the consultant, on their experience. But b) it's sort of a first (...) [approach] to why the individuals end up with different conclusions about what to do. So we said, 'Why don't we try to develop guidelines that are comprehensive, that are consistent, and then try to encourage each of the donors to use these guidelines to send the consultants down and make sure they use these guidelines so we have more consistent data to work with, and then we can work these things out together.' So we spent some time in that process, and have actually field tested those guidelines in Ecuador, and just recently in El Salvador." (Rick, Agency Engineer)*

Nevertheless, expert knowledge resides as well in the local organizational context, where it also shows this normative tendency. Much as in the case of the relations between international and national organizations, there is also a system of relations through which the local organization responds to the community's demands. However, the demands themselves are induced by the local organization pursuing its own agenda:

> Juan, is telling me how the members of the community helped the Health Center personnel to construct cholera cots at the beginning of the epidemic
>
> *Felix: "And was that on their initiative, or how did it work?"*
>
> *Juan: "Yes, legally it was their initiative, but we always...they are advised by us, 'You have to do this,' and they got tools, they made the metabolic cots, about fifteen or twenty of them." (Juan, Health Center Physician)*

In sum, the discussion this far has shown us the workings of the process that is transforming the cholera event from a marginal distraction, to a crisis and then into a piece of normality. The findings in the case of cholera are in consonance with the notion that social reality is locally constructed. I have shown that cholera assumes a certain "opportunity potential," which translates into a variety of issues, according to the agents' contexts. For people in the Health Center, cholera structures an opportunity for outreach and for the dissemination of messages concerning specific measures of hygiene. In the national context, it acts as an opportunity to garner resources and enforce sanitary policy and practice in local contexts. For the International Agencies cholera is both an opportunity to garner resources and to promote specific causal accounts of health and disease, as well as to reinforce specific patterns of health care practice. In the overall picture it is the organizations from the international context that appear to set the pace in the process of interpretation and reinterpretation of cholera. Through their control of critical resources and through their inputs into mechanisms such as training processes they appear critically to determine the dynamics of articulation of cholera in the national and local contexts in terms that suit their own agenda.

Additionally, I have shown in this section that the articulation of cholera and the organizational agendas is crucially mediated by expert knowledge. First, it is expert knowledge that defines the area of specialization of any given bureaucratic

organization, and it is toward that area of specialization that each organization steers its activity concerning cholera. Additionally, some organizations, especially those in the national and international contexts focus their work explicitly upon the generation, codification and provision of expert knowledge explicitly as "advice," rather than embedded in other activities such as clinical care or technological products. Furthermore, expert knowledge is used to measure and legitimize some among alternative courses of action. Finally, expert knowledge is inherently authoritarian. It is built upon the assumption that expertise produces a better type of knowledge, which should be followed by everybody.

Practice and the Agenda

In chapter IV I discussed how the construction of cholera as a social event occurred in and through practical action. I will now extend that discussion by exploring what reducing cholera to the limits of organizational agendas means in practical terms. It is in their everyday work that agents establish and maintain their understanding of the issue of cholera so that its meaning becomes relevant to their ongoing patterns of action and purpose. In this discussion I will touch upon two related practical processes through which the link between cholera and the agenda is established and sustained. The first is the redistribution and redesign of work that occurs, through a process akin to trial and error, in the encounter between organizations and the challenge of cholera. The second is the specific practice that results in the construction of organizations as socially "real" products of work.

The redistribution and redesign of work

The normalization of cholera implies in all contexts a process of organizational learning. In their repeated encounters with cholera agents learn to redistribute tasks in a way that incorporates cholera into the flow of everyday work. It is the micro-processes of repetitive activities that sustain this incorporation of cholera in everyday life. Through a process resembling trial and error, people bring together in their activity, in the form of pragmatic compromises, their normative assumptions, their previous experience and the pressure from agents in other organizational contexts. In the following example we see how people in the Health Center have learned through repeated efforts to distribute outreach work evenly among themselves:

> *"Mainly, we do sanitary sweeps, going from one house to the next, through all the neighborhood, it's eighteen neighborhoods that we visit. Our community work is quite extensive, and we go there, the director and myself, with the rest of the personnel taking turns, that's the assistant nursing personnel, because they also have to look after their clinics, and usually they stay only a short time. And this year they're involving the maternity nurses as well. Usually only those in the outpatient clinic did this work, but this year it was decided that all the personnel [should take part], because they are the ones that take turns, and they can go once a week; that way the personnel won't be exhausted and you always leave two nurses on this side." (Julia, Health Center Nurse)*

Another aspect of this learning is the progressive diminishing of specific cholera efforts as these prove unnecessary. People in the Health Center learned that they didn't need the community cholera hospital originally set up and so they dismantled it. Further, they have learned to distribute the work of attending the now rare inpatient cholera cases between the nursing staff from the maternity and the outpatient clinics. These two groups of nurses have relatively different schedules, so distributing the work between the two groups allows them to care for patients throughout the day or night without any of the nurses having to remain in the Health Center beyond their usual hours of work.

Work also changes to accommodate cholera in other ways. An important aspect of this is the shifting of organizational limits that allows the organization to integrate what were previously "outside" resources in order to compensate for the added demands of cholera. In the local context this is seen most clearly in the incorporation of the community into the cholera control efforts, for example by putting volunteers on the call duty list, or by enlisting their help in making cholera cots, as Juan pointed out above.

This redefinition of limits also shows in the efforts organizations in all three contexts make to get the issue categorized as an inter-sector responsibility while at the same time attempting to retain the upper hand in decision making. The outcome of this strategy would effectively extend the discretionary limits of the health organizations beyond their formal boundaries. For example, one of the International Cooperation Agencies is promoting the idea that cholera is an issue that involves the responsibility both of donor and of receptor nations, weaving the issue of sanitation into a broader discussion about Regional economic and social development. This would allow the agency to draw on a larger pool of resources not directly tied to health care and prevention, while at the same time retaining its key role as technical advisor.

A further strategy of articulation consists in "carving up" the issue of cholera into blocks of activity that can be managed by each organization on the basis of their specific expertise and interests. The result is that organizations only take on the responsibility for the sets of activities that fit most easily into their ongoing efforts. This, however, has some important drawbacks:

> Pedro has been telling me about how the National Cholera Control Plan was presented to a variety of International Agencies in a search for funding. He points out that the Government has difficulty in putting up any of the money needed for this plan to function adequately
>
> *"So we have a critical mass of all the activities and conditions about the type of technical and financial aid that can be given. And an example we saw is that even the Plan, which is an integral part of what we presented, seemed important to a couple of agencies, but the rest is a little unprotected due to the social and economic crisis the state is going through..." (Pedro, Government Physician)*

Finally, rethinking the epidemic implies a change in the legitimacy of the agents involved. Whereas initially it was considered a politically loaded issue, increasingly it is pushed toward the "technical" side of the bureaucracy, so that interventions by political agents are increasingly viewed as inappropriate.

In sum, it is in actual work that both cholera and the agenda get adjusted and articulated to each other. This does not happen in an abstract space, but rather is intimately tied to practice. Specifically, I identified five strategies that the agents discussed for the redistribution and redesign of work concerning cholera: First, the accommodation of tasks that results in a "division of labor" to suit the constraints of time and resources of the agents; Second, the redefinition of organizational limits to incorporate resources existing beyond their formal boundaries, for example in the community; Third, the reinterpretation of the problem as an inter-sector issue in order to involve other agents; Fourth, the fragmentation of the issue into sub-units that can be dealt with by the specialized knowledge of organizations; and Fifth, the redefinition of responsibilities that shifts the problem from political to technical agents.

The construction of organizations

In contrast with the 19th-century experience in Europe and North America that I will discuss in chapter VII, organizations are a taken-for-granted aspect of existence in the health sector in most contemporary societies, including Guatemala. In relation to

this cholera is again no exception: Agents count on a wide range of pre-existing strategies through which they can make sense of the epidemic and of their actions with respect to it as organizational phenomena. Indeed, people resort to organizational "solutions" almost automatically. As a result, when cholera first struck in Latin America, one International Agency immediately began promoting the formation of "Cholera Committees" as a way to address the crisis.

> *"In this work, what the Agency did was stimulate the creation, at the Central level, of a national group with representation from the diverse sectors, national authorities with sufficient power to start activities of prevention and control. But in the same way, at the Department level, at the District level, at the Municipal level, we promoted groups to work on cholera prevention activities, on the one side on surveillance, to recognize epidemiological situations as soon as possible, and so avoid the propagation and spread [of the disease] as far as possible, and also, of course, reduce deaths..." (Andrés, Mission Physician)*

Such structures were either formed *de novo* or by reactivating existing entities, without much conscious thought being given to the fact that such courses of action are, at least implicitly, choices between alternative ways of doing things.

> *Felix: "These committees that you formed with different institutions, was this before the cholera, or as a result of cholera?"*
>
> *Beatriz: "No, this was working before cholera, yes, and with cholera we came to motivate it and follow it up in what we were interested." (Beatriz, Health Center Physician)*

In sum, when addressing cholera, agents articulate actual organizations that are modeled on previously existing prescriptions about the general forms and functions of organizations. However, this does not mean that the organizational phenomena that arise in relation to cholera are straightforward reflections of the past. Rather, organizations are a part of the dynamic relationship between material substrata and social practices that make up the social order as a permanent process of development, also feeding into the wider context of the health sector and society:

> *"I could give you examples, countries where the cholera leads to the formation of an Interinstitutional Committee, with National and International Agencies, where this model is taken afterwards for other things, for other problems, such as Chagas' disease, for the control of acute respiratory diseases, for the management of problems in nutrition,..." (Edgar, Agency Physician)*

The institutionalization of "organizational" solutions has made the coordination of complex responses involving many people much smoother and more effective than in the past. However, the taken-for-grantedness of the organizational solution in modern life also has another side to it. Existing organizational limits are very real for individuals, who find it difficult, if not to conceive, at least to pursue action across the formal limits of organizations, and as a corollary, across social sectors. As a result we see in the case under study how interorganizational coordination becomes, not just a means to address cholera, but an object of work in itself:

> *"Fortunately, or unfortunately, there's fourteen units of the Ministry of Health that are mini-departments of health communications. Bad, from the technical point of view, due to uncoordination. So, there are other components that produce [educational supplies], and we as a department support and sanction [them], but more indirectly." (Irma, Government Journalist)*

• • •

> *"...to give you an example, there was the Municipality, so the thing was we organized with the Municipality, its Council, that they would become involved with the Public Health personnel. So the resources of the Municipality and the few that Public Health had, [were] put together in a single block and [we] started to work. First we organized the Municipality with its members, and then we involved the whole sector, for example the police, telegraphs, to have a tighter communication, no longer that each one do their own work separately, but rather that it all lead to the same end. So, in order not to duplicate work, it was better to work it all in a single, organized block." (Sonia, Health Center Caseworker)*

This organizational division of labor, accompanied by a subsequent effort at interorganizational coordination, contrasts significantly with the early 19th-century experience, where it was mostly "public minded" individuals or spontaneous groups of individuals with no specific disciplinary or organizational affiliation who addressed cholera as whole: Before the lines between professional fields and between organizational spaces had set into their contemporary molds, the incipient local and national health boards were notoriously heterogeneous and lay in their constitution (Rosenberg, 1962). By contrast, we now live in a time when the organization has acquired an inevitable reality that both serves and restricts people in their relation to the features of an event. A phenomenon must be fitted into the categories of organizations if modern agents are to be able to relate to it. If this fit is not found, the issue will not be addressed:

> *"In that it's probably the biggest black hole right now in Latin America, many other developing countries as well, there's no one institution that feels real responsible for peri-urban areas, whether its the water utilities or the Ministry of Health, and many institutions in fact are anti-periurban areas, like the municipalities, (...). And so that's where the highest public health risk is but the lowest kind of (...) attention and capacity, and political willingness to deal with it." (Rick, Agency Engineer)*

What Rick is talking about is not just people shirking responsibility for water and sanitation. The source of the problem runs deeper. The organizations and institutions existing in Latin America at present are modeled on organizations and institutions developed in the 19th and early 20th Century in Western Europe and the United States. However, they exist within a different context. For example, a contemporary Latin American city is not simply an anachronistic 19th century "Western" city: Its size, means of communication and available technologies are all different, and the institutions that are expected to deal with the problems that arise in large cities have become a lot more rigid than that they were when first invented in the European and North-American metropoles a century and a half before. However, agents have difficulty distancing themselves from the received institutionality of their organizations in order to reconstitute their practice in contextually relevant ways.

To summarize the process of organizational construction in relation to the articulation of the agenda with cholera, I have shown that organizations are a taken-for-granted social solution to which agents turned in dealing with cholera in Guatemala. This use of the organizational solution, although patterned on pre-formed notions about organizations, is nonetheless open to variation depending on local conditions, and feeds back into the broader social context from which it derives its models. At the same time, the institutionality of organizations is such that their limits are perceived by individual agents as relatively immutable. This makes interorganizational coordination for cholera an end in itself more than simply a means. Additionally, the organizational models that form the basis of this institutionality are derived from temporal and spatial contexts other than the Latin American. This introduces further problems as these extraneous organizational models are applied to contexts with which they have little affinity.

Resources and the Agenda

Up to this point I have discussed the development of the process of articulation of the agenda to cholera, and its realization in practice, particularly in the constitution of organizations. I have previously appealed to the notions that meanings are rooted in practice, and that repeated practice develops institutions. In this view of social construction there is an additional element, which in a way establishes the links, first, between practices across time, and second, between practices across space. This link is realized by what I call here "resources." Under this category I include the intuitively obvious material inputs that sustain activity, but also the hybrid of meaning and matter that is money and the 'know-how' that informs activity.

> *"...we used [a standing] procurement contract [with] three agencies, they already had a negotiated price, and they produce straight on our request and ship it straight from the factory to where it's going. So, that has worked well (...), we didn't have to set up a lot of new contracts, in order to do work." (Linda, Agency Nurse)*

The flows of resources in and around organizations are an important element of institutionality. With respect to cholera, not only do resources evince institutionalized relations through their ongoing existence before the cholera event, but they are themselves also institutions, part of the web of taken-for-grantedness in which the agents live. As a result, resource flows shaped the way cholera was interpreted and handled. In the example above, Linda's approach to cholera was molded from the outset by her familiarity with certain patterns of interaction with her providers.

As suggested above, money and materials are not the only resources mediating the relation between cholera and organizational agendas. Expert knowledge, as a key resource in bureaucratic organizations, also plays a critical role. In particular, the social construction of cholera is influenced in two important ways by the specific expertise controlled by an organization, and by the geographical distribution of the agents of that expertise. As discussed in the previous chapter, the specificity of an organization's core expert knowledge affects how it deals with cholera. This includes shaping what is actually done to address cholera, and where it is done.

> *Tom: "Some of them have used cholera as an opportunity to reinforce the importance of environmental sanitation. Others have [seen] it as an opportunity to reinforce CDD programs. Others have (...) looked at it as an opportunity to promote technologies that are going to keep drinking water safe."*

Felix: "And those differences, what are they due to?"

Tom: "I think they're probably differences that are unique to the professional bent of some of the experts who are members of their staff, that's about it. I don't think it's organizationally different,..." (Tom, Agency Physician)

For example, the rationale followed by the International Agencies in choosing which countries to work in, and what to do in them, was significantly influenced by the distribution of critical experts:

"Eduardo is Ecuadorian, and has since returned to Ecuador, so working in Ecuador is, from his own perspective also very desirable. He's right there, it's simple and cheap, and he knows people, has very good contacts, plus the mission is interested, and it's one of the priority countries. I would say that Bolivia probably was the one country that was chosen pretty strictly based on the fact of the number of cholera cases, the other two countries had other factors involved." (Jack, Agency Physician)

The relation between resources, agendas and the meaning of cholera becomes more evident as we observe the dynamics of resources between the three organizational contexts under study. The most immediately striking feature here is the scarcity of resources that subjects experience in the national and local contexts.

"...you feel sorry for the people, the way this has been managed, there's no budget, so there are no medicines, nothing, you feel tied up and you can't do anything. It's that simple, what can you do? In those days I was telling you about (...) it was very nice, because you could work, there was help. For the last two years thing have changed a lot, and this last year has been catastrophic." (Juan, Health Center Physician)

* * *

"...we don't have a budget line from the Ministry, not even the Department for Epidemiological Surveillance has a budget line, so even less do we, being part of it. So all we have, we have gotten through PAHO especially, yes? A few things from AID, who have occasionally supported us, the Italian Cooperation,..." (Julio, Government Physician)

As a result of this scarcity, the organizations in these contexts depend on agencies outside their immediate environment for an important part of their resources, as the second quotation above suggests. This, of course, renders the national organizations liable to influence from external agents, and tends to derail their own plans:

Felix: "...is there any relation between what you've done in cholera and other things [you do], or are they completely independent?"

Oscar: "No, there's no relation. This is (...) due to the same budgetary problem. Like the rest of the state's dependencies there's a budget, but just on paper. So, unfortunately one must look for other lines with other objectives, say, in International Organizations, that may solve their research interests, that's the problem. Now, if one had a budget, a proposal, some ease in managing the budget, not through entities that take ten years, then it would be different, it would be different..." (Oscar, Government Physician)

The effects of this dynamic are felt throughout the system, reorienting the work of organizations in the national context toward the objectives of the International Agencies. This has a specific expression in the case of cholera. On one side of the resources equation, the evolving priorities of the International Cooperation Agencies are modifying their budgetary allocations to cholera:

"Well, I think that naturally when this started, a large percentage, 70 percent of activities and budget went to cholera, but for the last year we have equal percentages for each of the components we work on." (Tito, Mission Physician)

Meanwhile, on the other side, both national and local agents experience the consequences of these changes:

"...the [International Cooperation Agencies] decide that 'X' is going to be done, and suddenly the money runs out and its finished! That's not good..." (Beatriz, Health Center Physician)

* * *

"Well, at the level of the Cooperation Agencies, they have their own programs, their own lines of work, and to some degree these are difficult to adjust to our needs and those of the community, and this creates some resistance to demands. Because maybe what has happened in the past with the Cooperation Agencies has been a certain paternalism toward government and the communities, and they have been asked to do things that really we should do. So, at some point the Agencies got tired, the funds finished, the donors are asking for explanations and the national information system can't provide the results they would desire." (Pedro, Government Physician)

Finally, similar dynamics of restriction and conditioning on the basis of resources may also apply in the case of expert knowledge, where agencies control the flow of know-how:

"So the CDC came to do this case-control study in which the Ministry had little interest, and even less afterwards, when the moment came for the analysis of the data. All was going well, the analysis, the fieldwork was shared, they taught the epidemiologists, but, - the [Ministry] epidemiologists even left it in writing for me, because I asked them to document it for me –, the [CDC people] didn't give [any] explanations about the data analysis, and were very guarded [about their work], and then

didn't leave anything in writing. So the [national epidemiologists] told me that there was a moment when they had to distract the colleague who was working on the data, in order to photocopy the analyses and be able to study them also, because they had to give a report to the Ministry, and they couldn't afford to wait for the CDC to send its report. So, this limits the possibilities of working with the Agencies,..." (Leonel, Mission Physician)

It becomes apparent then, that resources are not simply self-evident pieces of reality, objects without implications. Rather, they are the medium and the synthesis of the history, power and interests of the system under study. Resources make apparent the institutionalized processes characterizing the organizations involved in dealing with cholera, and help to frame the issue and the limits of practical action. Finally, resources mediate the establishment of the asymmetric relations between organizations that permit the generalization of the objectives of the agenda of the more powerful organization over the weaker.

In this chapter I have shown how each organization possesses a pattern of purpose and practice that is specifically its c ר, which I have called an agenda. As the phenomenon of cholera evolves, it becomes progressively connected to the organizational agenda. This happens through a three-step process going from the initial focusing upon cholera as a valid issue, passing through a crisis management phase, and ending in the re-assertion of the original organizational agenda and the reinterpretation of cholera in a way that makes it fit in with that agenda. In the process, both the agenda and the issue are transformed, cholera taking on a quality as an "opportunity" through which to further the organizational agenda, but at the same time losing some of its relevance as it becomes a normal part of the organizational experience.

This process of articulation of the agenda with cholera does not happen in a vacuum. Rather, it is the result of actual practices, in which organizational members learn through "trial-and-error" to articulate their cholera experience. In this respect, organizations themselves, as taken-for-granted solutions to social issues, are an outstanding feature of the contemporary experience with cholera. In other words, contemporary practice concerning cholera is organizational practice. In this experience, material resources and the 'know-how' of expertise play a key role as the substratum upon which relations are built between organizations, as cholera is re-articulated to their agendas. In this respect, the leverage that International Agencies exercise through

their control of resources and of means such as training, results in their agendas tending to prevail across all three contexts.

As products of the localized activity of organizational members, agendas reflect both the specific features of each organization's existence, and the contextually derived commonalties it has with other entities. However, agents must continuously interact with each other, bringing their differing agendas into these interactions. In the following chapter I will discuss the process whereby a shared space of interaction based on both the common issue of cholera and the contrasting agendas can be sustained.

VI.
Negotiating Cholera

As far as humanity is concerned, cholera is a social process. As such it involves multiple agents coming together, and in the process identifying the limits between their respective understandings of cholera as a framework for their action in common. In this chapter I will discuss how the negotiation of this framework happens.

Negotiation occurs in Language and in Practice

From the literature review we have gathered that negotiation is a pervasive process in social life (Barley, 1991; Strauss, 1978). Furthermore, life is itself a complex of practical and discursive action: we stake and negotiate positions both in what we say and in our behavior. Indeed, both are mutually dependent aspects of the same process. Through language, agents structure the framework of action, which then goes on to constitute a forum for further discourse. In this section I will show how the mutually dependent phenomena of discourse and practice are related through negotiation and how this results in limits being established between contrasting interpretations of cholera. Further, negotiation will be seen as an element that fits into the context of a broader cultural framework, from which it draws arguments and referents. Negotiation will be seen to mediate between the actual meaning cholera is given and the organizational agendas.

Although for analytical purposes we distinguish discourse and practice, in fact these are inextricably linked element of a whole experience:

> *"...we developed these guide-lines about waste-water management, not waste water treatment, but waste-water management, and then had two regional workshops, one in Chile for the Andean countries, and another one in El Salvador for the Central American countries, where we brought in from each country senior-level folks from the Ministry of Health, the water utilities, the Municipalities, finance and agriculture, and the Environment Ministries, (...) and we exposed them to these ideas and got them talking to each other on this issue and seeing some of the big-picture stuff." (Rick, Agency Engineer)*

In this quote, Rick naturally and unself-consciously brings together practice and language as he shows us how the development of linguistic categories (waste-water *management*, waste-water *treatment*) structures activities that in turn serve to promote further talk between agents. Additionally, we may note how Rick's organization, a relatively powerful International Agency, is in a position to structure this forum so that the negotiation of the significance of cholera and the identification of organizational activities vis-à-vis the epidemic continue from then on within the lines defined by that powerful agent.

Furthermore, agents actively seek out forums in which they may promote and defend their understanding of the situation. This is especially the case of the organizations from the international context, which have access to formal arenas for discussion, such as presidential summits and professional conferences, through which they attempt influence political action at the highest levels of the nation-state. However, this strategy is not limited to them, and indeed agents in all contexts in one way or another seek out and use the forums available to them:

> *"...in these monthly meetings [with non-government agencies working locally] we talk, not only about cholera, we talk about everything, and we have tried to use the same language, so that if I tell people, 'Look, you have cholera, you must take ten tetracycline pills,' so will the doctor that works in institution 'X,'..." (Beatriz, Health Center Physician)*

Again, we may note in this example that agents attempts to structure, through the establishment of a common language, the framework in which action will be performed. A further point emphasized by this quote is the nature of organizational work as "talk." Organizational agents relate to each other precisely *to* talk and *through* talk. In this dialogue, they "stake out" the limits of their interpretations and the accounts of their respective realities. In the process they adopt strategies that lead them to "agree" about the limits, if not about the substance, of action (*Cf.* Strauss, 1978:227-228). Agreement is used here, not necessarily in the sense of cooperative compliance, but rather as a recognition of the line where one's will meets that of another:

> *"On the contrary, governments resisted this position and wanted to take things to the field of avoiding the entry of cholera. Measures such as the closing of border crossings, the control of migrations, and stopping the exchange of merchandise – especially fresh and natural foods – were suggested, and adopted. Seeing this we took a firm stand in the sense of saying: 'The scientific knowledge we have indicates that there is no stopping the entry of cholera,' and we even went as far as suggesting to the*

governments that the measures they were taking were inadequate and not efficacious. An important amount of time was wasted in this." (Edgar, Agency Physician)

In this further example we can see how Edgar's agency pushes it's understanding of the situation to the point where tensions build between it and its interactants. This pushing of limits can be either verbal, as in this case, or non-verbal, and it can be either active or passive. So for example, an agent can passively and non-verbally state its position by ignoring demands in practice:

Beatriz: "...we tried to do lots of things on a high level, but we met barriers."

Felix: "What kind of barriers, how did you meet them?"

Beatriz: "For example, we tried to get the doctor in charge of the Food Control Department to set up really strong programs to help us with this kind of work, because (...) controlling street vendors isn't just the state's responsibility, the Municipality must also intervene, and the Food Control Department has its sanitary inspectors for these things, but we didn't get favorable results. We expected the doctor to be as enthused as we were, and seeing that chaos he would go, 'Well madam, if in so many days you don't cover up your food, we'll close down your shop!' But we didn't get any support, and things in these areas remain just the same as usual." (Beatriz, Health Center Physician)

In contrast, the *de facto* termination of cholera funding by International Agencies acts as a non-verbal, but active expression of these agents' interpretation of cholera. Furthermore, negotiation isn't just about stating positions, it involves articulating the framework within which interaction happens. In this sense, the agencies from the international context evince a particular proficiency in structuring negotiations, which makes sense considering that, as shown previously, the objects of their activity are primarily discourses, rather than materials.

"...for example, in Peru we were successful in getting the cholera coordinator to agree to us designing and facilitating a one week workshop, where we brought together the key (...) players involved in issues dealing with water and sanitation, to try to bring them together in one room, for (...) three or four days, and try to come up with a national policy that was consistent and coordinated. Happily it's one of [this project's] strengths, we do that quite well, we design them in a way that really promotes constructive facilitation." (Rick, Agency Engineer)

Similarly, there is an effort on the part of organizations to identify interactants with whom they share a common language that may allow their "language work" to proceed smoothly. Again, this is especially the case among the International Agencies, for whom manipulating language is a large part of work.

> *"...the first thing that our unit did was try to increase the number of people in decision-making positions, people who were convinced of the part the environment played in the cholera episode." (Erich, Agency Engineer)*

However, agents from the national context also act in a similar way, albeit on a smaller scale, structuring the field of negotiation for local agents:

> *"I think we're on the right path, doctor. We're on the path because (...) the activities we are performing (...) imply listening to the operative personnel, hear their worries, and offset them with our perception, and that has been our work." (Pedro, Government Physician)*

A key determinant of negotiation is the wider cultural and causal framework upon which it draws for elements. In negotiation the interactants don't limit themselves to using the terms of the topic at hand. Rather, they refer to their broader understanding of reality both in interpreting the negotiation and in "arguing" (again, argument understood either as discourse or as practice) their part in it. This becomes particularly relevant as agents from strikingly contrasting cultural systems encounter each other. As Pedro goes on to point,

> *"...we have taken into little account the beliefs, attitudes and practices, cultural aspects of the community, and in place apply Western models that might be good for everybody, but here they have to be negotiated further..."*

Finally, negotiation can be considered as the process that mediates between interpretations and agendas. In other words, in interaction, agents negotiate interpretations in order to promote their agendas. In the process, contexts become interlinked in a web of each agent's intentions and the conditions imposed by other agents:

> *"...last year we held a workshop with the International Agencies, some NGOs[1], [and] Ministry personnel, in order to make a case definition that would be more understandable to health personnel. As there were personnel – nurse aides, technicians, inspectors, District Chiefs – they gave their definition, what they understood by cholera, but when we passed it on to the International Agencies, and got together, (...) we realized that, for example in* Petén *they understood cholera as one thing, and* Guatemala Norte *understood it as another and so on. So then when we sat down with the International Agencies and we (...) started having problems, in what they saw as the sensitivity and the specificity of the case definition. We started having problems with what they [were asking for], maybe because they want to unify at the level of the Americas; of course we*

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[1]Non Government Organizations

> *are thinking at the level of Guatemala and they are seeing all of America, so it was there that we started seeing problems in how we might (...) find a way for our personnel to understand it, and also for them to unify it with all of America,..." (Julio, Government Physician)*

We have seen, then, how agents actively and strategically seek out forums for the presentation and negotiation of their understanding of cholera, a process that links both practice and language. In this process agents realize their relative power in the framing of negotiations and the setting of limits between contrasting interpretations, more than simply in the actual contents of these interpretations. In terms of actual practice, a position can be "staked" either actively or passively, and either verbally or non-verbally. All agents engage in these activities. However, it is the international and national organizations whose work is concerned mainly with "talk" that appear as most proficient in structuring the terms of negotiation and in the identification of relevant interactants with whom they may share a common language.

Additionally, negotiation is not an abstract process. It is intimately tied to the specifics of social context, from which it draws both its arguments and the referents that give meaning to its terms. The negotiation is a part of the social setting, a condensation of wider interests, not simply an autonomous encounter between differing positions.

The Objects of Negotiation

In addition to requiring more than a single agent, negotiating contrasting interpretations of cholera involves "objects," that is, more-or-less visible issues around which the negotiation develops. In consonance with the notion that negotiation is a contextualized process, we should not understand these objects of negotiation as reified elements *outside* the parties involved. Rather, among the objects that are negotiated are the very elements of the negotiation itself, such as the rules by which it is conducted, the parties involved, and the criteria of access of these parties to the negotiation. Furthermore, the "contents" of the negotiation are themselves also integral parts of the life experience of the organizational agents.

As pointed out, agents start by negotiating the very terms of negotiation. As discussed previously, they negotiate the language of interaction concerning cholera:

> *"...in these monthly meetings [with non-government agencies working locally] we talk, not only about cholera, we talk about everything, and we have tried to use the same language,..." (Beatriz, Health Center Physician)*

They also negotiate about the agents involved in the relationships, that is, about the character of their interactants:

> Pedro is telling me about the problems he has seen in developing working relations between local health care personnel and community officials, explaining his own role as a mediator
>
> *"[The local personnel may say,] 'The thing is the mayor doesn't want [to take part in this], he dislikes me, and I dislike him.' Well, maybe now's the time for somebody neutral like myself to go, and we sit down, all three of us and let's talk, 'No, the doctor is nasty to me, he's never here, he didn't want to go have a couple of drinks with me,' or things like that, motivated by personal differences, but on the long run they are taken to the institutional level, and that leads to a lack of communication." (Pedro, Government Physician)*

In this quote the subject shows us how setting the terms of negotiation of the organizational response to cholera started by the statement of the contrasting characters of the parties. This negotiation about the interactants themselves can go further back however, starting the construction of an interpretation of the issue at the point where potential agents are included or excluded from decision making:

> *"[That CDD program manager] pitched in and was an effective respondent, so he carved out a place for himself and his program in the cholera control activities, but in many other countries the CDD program manager often was not even invited to the Cholera Commission meetings. The epidemiology directors, as was the case in Guatemala, developed and presented the national plan, and there were certainly varying degrees of innovation in the national plans that were presented." (Walter, Agency Physician)*

Such inclusions or exclusions *de facto* specify the nature of cholera. In the case discussed above, the result was the early characterization of cholera as a generic epidemiological problem – an epidemic – rather than as a diarrheal disease.

Furthermore, negotiation concerns the performance of the actual tasks of agents, such as the offering of clinical services or the development of a specific project. The content of such negotiations will therefore be intimately linked to the nature of work in each of the organizational contexts. So for example, in the Health Center, different professional groups negotiate about the responsibility for a specific clinical task:

"Now I think about it, another problem we faced were the residents, because I feel that the physician thinks, 'I am only an obstetrician, I am only going to look after my specialty,' and we had a case of diarrhea, it wasn't confirmed as cholera, and the physician didn't very much want to get [involved]. 'Send it to the hospital,' [he said,] but finally agreed, 'no, this one stays here.' And we had a meeting, it was very successful in the end, after saying no, they understood that you really can't just look after normal deliveries, you have to deal with anything that comes here, and now they have cooperated with us." (Julia, Health Center Nurse)

Similar negotiations over responsibilities also occur at the interorganizational level, as discussed previously concerning the inter-sector organization for cholera. In terms of actual objects, it is resources that constitute the prime focus of negotiation. What agents are "bargaining" about in most cases can be reduced, for practical purposes, to resources. This is the case in a variety of situations, whether agents are explicitly discussing a type of resource, or referring to conceptual tools, such as plans, which are in fact summaries of agreements about the allocation of resources in space and time.

"In some cases they would say, 'Well, look, the Minister here is very interested, I need to use a quick test to ease this pressure.' 'O.K., use this quick test, but afterwards, what will you be able to sustain, what will you be able to use in a stable, regular way?' (...) So, [I help by] giving them this information and these contacts [with] the reference centers, and afterwards with centers for assistance and local universities in this country." (César, Agency Microbiologist)

* * *

"The funds from the BID[2] and the oil-producing countries bought a part of the plan we developed last year. (...) this [doesn't] represent an effort of my own, but rather of a variety of levels. The International Affairs Coordination Office, PAHO and ourselves, we presented this, we distributed the plan to those interested, and so buyers came forward who wanted to (...) help." (Pedro, Government Physician)

However, any negotiation about tasks and responsibilities is immersed within a wider set of interests, that is, within a variety of (at least potentially conflicting) agendas.

"...we are developing support material so people start changing: 'Promotion is putting out handbills.' No ma'am! You should see the quarrels we have because of the people here, it's terrible. It's harder changing this level than the local level, because here

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[2]Inter American Development Bank

everybody's goal is health education, they don't place (...) education in relation to a larger process..." (Irma, Government Journalist)

What is at stake for Irma here is more than a task such as distributing handbills. What she is arguing for is her organization's interpretation of the relation between health promotion and the "big picture" of health causality and health care. In other words, in specific instances of negotiation it is always more than the object of negotiation that is at stake. What agents are debating is the relationship between this object and the general framework of interpretation within which they exist. This relationship brings the discussion back to the issue of causal models as specifications of the general framework of interpretation, something that is especially evident in the interface between formal organizational and community interpretations.

"...the things people believed you had to do against cholera, [like] taking a few drinks, because that would kill the microbes – so they said. So notice how a cosmology like this takes you along absolutely unexpected paths. To understand, for example, that water was the basic transmitter, I would say it was a huge communications task, which we tried to undertake. I'm not too sure we managed it, but it was one of the basic tasks at [the community] level,..." (Manuel, Mission Journalist)

Similarly, this linking of the negotiation of tasks with general meaning systems also focuses negotiation upon definitions and conceptualizations, as points of expression of the meaning system and general intent to which each organization subscribes:

"And another of our achievements has been that, at least the institutional people start seeing cholera as part of the diarrhea program, not like before, the diarrheas [on the one hand] and the cholera [on the other], no,..." (Irma, Government Journalist)

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"[In government] they're also more interested in an adequate definition of cholera cases, because for them it is a political or public problem when cholera cases are reported and perhaps they aren't cholera. They are more reserved in accepting [the data], and therefore their statistics are more reserved, right? They aren't too high." (Leonel, Mission Physician)

Finally however, we must not lose sight of the fact that negotiation as a practice is not the mechanical result of realizing in the concrete some abstract, absolute "meaning system" belonging to a Platonic world of ideas. Rather, it is in the negotiation of specifics that agents both construct and represent what they want to themselves, as well as to others. Meaning systems and sets of behaviors, including negotiations, are

intimately connected, both depending on, and determining, each other. People interpreting cholera and negotiating these interpretations are dealing with cholera as a practical experience, not as an abstract intellectual category.

In this section I have shown how both the "forms" of negotiation, that is, the rules, the parties, and the criteria of inclusion in a negotiation, and the "substance" of the negotiation, namely the tasks and the resources of activity, are themselves objects around which potentially contrasting interpretations of cholera are negotiated.

The Arguments of Negotiation

In the first part of this chapter I suggested that negotiation is a complex of discursive and practical action. Specifically, it is action through which agents justify implicitly or explicitly their interpretation of cholera, and their behavior in relation to it. Such justifications can be thought of as "arguments" built on the logic of the agents' broader understanding of the world. In this section I will review the main arguments through which negotiation happens, and how these articulate the complex of discursive and practical action. I will consider three kinds of arguments. The first are "arguments of commonalty," in which cholera is rendered as an element within a broader category of phenomena. The second are arguments in which cholera is itself presented as the proof for a certain agenda. Finally, I identify arguments that appeal to the authority of expert knowledge.

The first and perhaps most evident set of arguments used by agents are the arguments of commonalty. One such argument of commonalty is made in the concerns for joint approaches to cholera. This is the argument that underlies the example discussed previously about the search for a common language among organizations in the local context. It is also the argument implicit in the search for a conceptual *"common ground"* between cholera and diarrhea:

> *"...it seems to me that the linkage [between childhood diarrheal diseases and cholera] really depends on our finding the common ground, and that common ground is not going to be easily found, as long as we've got these great differences, and somehow we have to bring this to a higher level." (Walter, Agency Physician)*

Other arguments of commonalty concern calls for joint responsibility in cholera control measures. The argument for a shared commitment is related both to the "effects" of cholera as it is to the "responses" to the disease.

> *"But I repeat, community participation, the involvement of everyone is important. I have always believed that cholera is a problem that presses* Ramiro de León[3] *just as much as it presses the women who sell tortillas just 'round the corner. So, it affects everybody, and we all have to take part in this. Just as the women have to take part, washing their hands when they're going to make or distribute tortillas, so does* Ramiro, *seeing how he gets the funds to solve it, so, we each have a task to carry out..." (Julio, Government Physician)*

The second category of arguments renders cholera *itself* into a proof of specific measures of intervention, or as a demonstration of a situation. In a way, cholera becomes a "teacher:"

> *"Again, (...) cholera taught us that the [sanitary] situation is very much weakened, that it must be rebuilt, no? That we must reconstruct the infrastructure, that we must rehabilitate what there is, that we must expand the reach of services. So, the cholera is also prompting this type of action. It's a bit like the door that generates the motivation, the worry that is needed to reorient the investment processes..." (Erich, Agency Engineer)*

Finally, there is an argument that underlies many of the concrete relations that develop between the different organizational contexts. This is the argument of expert knowledge as a basis of authority, an argument that, in more or less veiled fashion, de-legitimizes alternative perspectives:

> *"...one of the first things we (...) realized was that, for example (...) the Municipalities, their first reaction was, 'Cholera is being spread through the water supply system, and we don't have any chlorine, can you send more chlorine?' And so then the Agency mission would say, 'Can you come down and assess whether this is a legitimate request,' and (...) what we realized quickly was, they were irrational requests, or not wise requests,..." (Rick, Agency Engineer)*

As the examples show, arguments are eminently interactive phenomena that serve to relate agents, both to each other and to their interpretive frameworks. In grouping phenomena, proving points and claiming authority, agents are staking claims that either differentiate them from, or associate them to, other agents they have

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[3]The Guatemalan President.

identified as independent entities. I will now turn to exploring the character of these independently defined parties.

The Nature of Parties in the Negotiation

So far I have shown that agents negotiate a variety of interpretations of cholera through language and practical action, and have discussed the objects and means of that negotiation. In this section I will present evidence concerning the nature of the agents themselves as parties to the negotiation. In this respect, an obvious categorization of agents would distinguish them according to the organizational contexts to which they belong, that is, recognizing them as international, national or local. However, here I am primarily interested in two patterns of association between organizations and within organizations that will later on help us to understand the dynamics between the three contexts.

One of these patterns reminds us that organizations operate, not only as independent entities, but also as parts of larger units. The other, contrasting pattern, shows us that apparently unitary elements also have sub-units that enter into subsidiary negotiations. Whether one or the other pattern becomes relevant depends on the nature of the task at hand. Agents choose strategically to assume a role in one of these categories according to how this is perceived to further their interests. In consequence, the result of the negotiating process is a fluid social order, in which issues and agents are continually being reconstituted.

As indicated above, a party in a negotiation can have a composite nature. For example, we saw previously how one of the International Agencies interacted, not with a single national government, but rather with a conglomerate of representatives of such entities, in the form of a regional Presidential Summit. Similarly, the multiple missions of the International Agencies in Guatemala may at times present themselves as a unitary bloc in negotiating issues with national organizations:

> *"at present, not only [this organization], but also the rest of Agencies, supported the move to enter into a National Diarrheal Diseases Plan; so, now (...), as we all supported that move, (...) the government, not just [our organization] and the Agencies, but also the government, has called its plan the Plan for the Control of Diarrheal Disease and Cholera,..." (Tito, Mission Physician)*

The second pattern is the opposite of this. Although agents may act as units, they are not necessarily monolithic entities. This is true both of single organizations with respect to their different sub-units, and of the different organizational contexts with respect to the organizations that may exist within them. Negotiation goes on just as much between these less evident components as it does between the more apparent entities themselves.

> *"One of the things I did ask our missions to tell me in each and every request for assistance was, first, 'Has this request for assistance been discussed at the National Commission?' I didn't want to ask them for a piece of paper, that would take another three weeks [laughter], but, 'Is the concept that we would provide this particular piece of assistance known to this committee?' In other words, 'Is it part of the big picture, and have you discussed it with other donors?' Because sometimes the donors were on the committee, but sometimes the donors had a separate committee, or sometimes the donors weren't organized. [So] I asked them to assure me (...) that they had checked with the other major donors, and it was not duplicative, nor did it leave a big hole in it. They need a million and a half packets of salts and they ask me for a million, where's the other half million coming from? There was no way to be too [sure] about that kind of thing, but, always ask the mission to have answers to those questions, and expect them to be able to answer them." (Linda, Agency Nurse)*

This quote illustrates the give-and-take process through which the sub-units of an organization relate to each other, but it also suggests that the patterning of concerted action versus autonomous operation is the result of the way in which specific issues relate to the organizational agendas. In the example above, Linda maintains a certain "distance" from her own organization's sub-units in the countries (the missions), in order to ensure the large-scale interagency coordination that will guarantee both greater efficacy and greater efficiency and savings in the measures adopted. In other cases, however, similar organizations may perceive little advantage in pursuing coordination.

> *"...at one level we are all promoting water and sanitation, but one donor may be doing it to improve health, others may be doing it to create jobs. For example, World Bank is funding a lot of water and sanitation efforts through the social investments fund in many Central American countries, and their goal is to create jobs, its not really to improve health or increase coverage. AID, (...) their goal is to create trade for US companies, so you have to use a US-made hand pump, for example. And so those conflicts of goals often lead to differences in how they implement the policies that are promoted." (Rick, Agency Engineer)*

In other words, it is the nature and compatibility of organizational agendas and aspects of these agendas that shape and sustain the patterns of relationship between

agents or organizational contexts and between their sub-units. When agendas run along similar lines, there tends to be cooperation. Indeed, agencies capitalize consciously on each other's interests, especially when relations occur between relative equals in terms of resources and/or authority.

> *"...also the sources, the donor agencies, they have that bias [toward associating cholera to diarrhea]. So then we steer them toward taking advantage of [cholera]. In fact, the donor agency isn't shortsighted, and it knows that there's a lot to gain in the field of acute diarrhea in general, so we work on that." (Leonel, Mission Physician)*

On the contrary, when patterns of purpose or action diverge, there is contradiction. Within a larger context, the potentially unfortunate results of this kind of dissent are pointed out by one of the interviewees:

> *"It's such a broad thing, which doesn't just have to do with cholera, it has to do with health care in general in our countries. There's a weakness in the state structures with respect to public health. A responsibility of the state, due to this permanent worry and form of work of medical care, no? This is what prevails, what is hegemonic, and that is what is done. Meanwhile, interventions at the collective level, at the level of the population and not [of the] individual, remain very much weakened in all the countries, and some of the Ministries are also very much weakened, due to a policy of diminishing the size of the state, with the [structural] adjustment policies that the World Bank [and] the International Monetary Fund impose. They're agreements, but they are, in a way, dictates. [The governments] have to do this in order to keep getting the loans (...). So, with the state severely weakened, then the physicians, the nurses, they are all worried with taking care of patients in the hospitals." (Paulo, Agency Physician)*

As Paulo points out, the economic distress ensuing from the implementation of structural adjustment policies has aggravated the difference between contrasting patterns of purpose and action to which agents are committed – government on the one hand and the health care professions and organizations on the other –. However, beyond simply identifying potential agreements or differences within a negotiation, it is of interest to recognize the processes leading to a given outcome. I must emphasize that this is not an outcome in the sense of a single result. Just as negotiation in this context is understood as an ongoing process of co-definition of the situation, so the outcome must be understood, not as an immutable order, but rather as a dynamic, fluid system of relations between agents that are constantly adjusting to each other.

Adjustment in Negotiation

The last point I will touch upon concerning negotiation of the social order we call cholera deals with the effect of negotiations upon the agents. Although negotiations can be thought of as having outcomes that are independent from the parties, the main result of any negotiation is change in the agents themselves. These changes can be thought of as "adjustments" to a redefined situation. The term adjustment is used here without any functionalist intent, as if it assumed an approximation to an ideal fit. Rather, I use the word to characterize changes in agents that are the result of specific negotiations, rather than of unspecified influences. As possible categories of adjustment I will discuss here changes that are driven by "technical" features of the task, changes derived from the explicit intervention of a third party, changes due to the covert activity of a party, changes driven by explicit coercion, and no change, that is, a lack of adjustment.

The first type of adjustment derives from a clash between interpretations that is driven by the nature of the task itself. We might call this an "endogenous" adjustment, in which the parties recognize and follow, for example, patterns of distribution or flows of resources that make sense in terms of the technical requirements of the task.

Adjustment may also involve mediation, in which a third, usually more powerful party will "sort things out," assigning meaning and responsibilities to the negotiating parties.

> Julia has been telling me about differences of opinion that were expressed in the Health Center concerning the responsibilities of the obstetrics residents with respect to cholera patients. While the residents wanted to limit their work to obstetric patients, the nursing staff, considering that the residents were frequently the only medical personnel at hand, thought they should attend any emergency, including cholera. This second position was eventually accepted by the residents. I am asking Julia to expand on this.
>
> *Felix: "Let me go back for a moment, to the thing about the physicians, what you were telling me, that initial resistance, so to say, 'This is not my specialty' and then the change, was that only the residents, or was it all medical personnel?"*
>
> *Julia: "No, more than anything it was the residents."*
>
> *Felix: "And that has changed, would you say, that now it has changed, and it was something that happened within the group, you took it on by yourselves?"*

Julia: "No, we intervened, Dr. Ramírez del Pilar came. They said that they didn't know there was a UTC[4], so I explained that there was a UTC here, that the nursing personnel had a kit to deal with [cholera]. Once the explanations had been given the doctors accepted, and their Chief Resident also came, and in the end it was a fabulous meeting, after the clash there had been..." (Julia, Health Center Nurse)

* * *

Pedro is explaining to me how he deals with differences between the local health personnel he supervises and people in the community

"So, this is also a role that I have, as a mediator, a catalyst, "The Catalyst" is what the Minister called me [laughter]. So, that's a function, yes, mediating in this. Its saying 'Look guys, O.K., don't make things [difficult], if this square is the problem, let's see how we can make it round, yes? So, I give them another perspective..." (Pedro, Government Physician)

A further means of adjustment involves more-or-less covert interventions as ways to weaken the position of one or more of the parties vying to define the situation.

"...there was a moment when the Ministry of Health was asking that people be burned immediately, as soon as they died. I personally was shocked. I was one of the ones that understood it was like saying simply 'sweep the house' and forget all about the human life and death that was behind this. Personally I tried to dilute this message, it appeared inhuman, (...) disrespectful for the country, so we didn't push it, because controlling communications is like controlling power, in this sense." (Manuel, Mission Journalist)

These examples are about the adjustment of organizations vis-à-vis the community, and although this is perhaps not the main thrust of my research, an important area in which organizations negotiate meaning is precisely in their relation to members of the community. This evinces the primary role that local agencies, and more specifically individuals in them, have in establishing the interface between the system of organizations and the community:

"...sometimes we find families that are negative and don't want to follow [instructions], they say, 'Ah, it wasn't cholera, he died, but it wasn't cholera.' It happened to us at La Atlántida, *they were a bit negative, but once we discussed it [and] we sat down to talk with their families, they said 'O.K.,'..." (Marta, Health Center Nurse)*

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[4]Cholera Treatment Unit.

As the example illustrates, adjustment in negotiation is, to a large degree, an interpersonal process. It is specific individuals that expand the meaning of the issue to the point where agreements can be made in concrete situations:

> *"I happened to go to the (...) Emergency Coordinating Committee in Peru last time I was there – I do a lot of work in Peru, so a lot of my examples come from Peru – and it was chaired by the Vice-Minister, and I was surprised by the policy-level discussions as opposed to working out details of things, and I asked my colleagues there, 'How do you get the details worked out?' Obviously you're not going to argue about who's going to [get] the trucks, these things, while the Vice-Minister is there, and he said, 'Well, we all know each other well, because we go to this committee, so then we're able to just work it out on the phone, or in smaller meetings later, so, you know, in effect work it out.'" (Linda, Agency Nurse)*

However, adjustment can, and often is, the result of coercion, in which one side explicitly or implicitly forces the other into a position of acceptance:

> *"(...) in order to get these workshops themselves we do have to get some initial buy-ins from the key players. Sometimes the Agency does twist arms, and say, 'Do you want money from us? You need to have a plan,' you know, and a plan that is, that makes sense. (...) and we do it in a way that we really don't influence the plan, but we influence the process, where we really make sure that the process is constructive and equitable and really integrated, but, uhm,... it works [laughter]." (Rick, Agency Engineer)*

Finally, it must be borne in mind that adjustment isn't an automatic outcome in the negotiation of differing positions. When demands for change go beyond the limits of what an organization is willing or capable of doing no change may ensue:

> *"...what's clear, whether that is a reasonable thing to happen or not, is that you had AID coming in to a Ministry of Health in Honduras, telling them, for example, 'We really like sanitation programs, but we really believe in the private sector, so you need to hire out, and get the private sector involved, and lower the market interest rates...' and then you had UNICEF come in and say, 'We really want to support you with the sanitation program, but we really believe in community participation, so here the people have to do all the construction, and you need to give away all the money and loan it at zero percent interest,' something like that, and each one sets up a separate unit, (...) and it drives the implementing institution crazy, and, rather than strengthening the institutions it's really weakening them, because it's not sustainable, creating enormous problems." (Rick, Agency Engineer)*

Once again, however, it becomes apparent that the relationship between the agents is constructed around the patterns of purpose and action to which the parties in the negotiation are committed, more than around the "issue" of cholera in any objective sense. In this chapter I have discussed negotiation as the interactive side of the social construction of the cholera event, in which limits are defined between competing

interpretations of reality. Further, I have shown how negotiation happens around specific objects, through a variety of argument strategies. Finally, I have discussed the nature of the parties and of their mutual adjustments in negotiation. The idea presented in chapters IV and V, that the social construction of cholera is associated in an important way to pre-existing organizational agendas, is further supported here. Indeed, negotiation is about adjusting to the material features of cholera and to others' understanding of cholera in a way that sustains the pursuit of each organization's own agenda. The drive to negotiate is provided precisely by the interest in preserving the commitments to that agenda. In order to understand how the preeminence of such endogenous organizational processes has come about we need now to turn our attention to the way in which cholera as an epidemic and organizations as social instruments have been simultaneously constructed and woven together through history.

VII.
Cholera and the Development of Organizations: Exercises in Modernity

Historians of cholera have long debated whether cholera was a cause or a consequence of changes in social organization and government in 19th-century Europe. This discussion has generated an abundant literature, but has hardly been resolved, probably because it deals with a false problem, and attempts to answer the wrong question. Rather than try to establish a simple causal relationship between cholera and social change, I will argue here that cholera became one more element in a constellation of phenomena that simultaneously focused, constituted and evinced the development of modernity in the expanding realm of European influence. The spread of cholera as a material and biological process was intimately linked to the growth of urban society and worldwide trade. However, the way cholera was defined as a disease, its insertion into the political milieu, and the nature of organizational responses to it were also all part of the development of modernity. To make the argument more obvious, I will let the historical record speak for itself, and show us how these "exercises in modernity" occurred in the case of cholera.

Europeans had known of the existence of cholera since the late 16th century, when Portuguese observers first reported its existence in Bengal. However, as pointed out before, the disease only gained world-wide notoriety after 1817, when news of its incessant spread first reached Europe. In the early 1820s, European governments counted on their experience with the plague – by then quite remote – as the first source of ideas and practices with which to deal with the new disease. Thus, "*When cholera arrived on the European continent, most regimes dusted off their files on bubonic plague and put what were by now fairly traditional policing measures into operation: military cordons sanitaires, quarantine, fumigation, disinfection, isolation.*" (Evans, 1993:136) The French government first faced cholera with a sanitary code that embodied the nosographic tradition in medicine, by then almost an archaism in medical practice (Delaporte, 1986:189; *cf.* Foucault, 1975). Across the Atlantic, a similar reliance on traditional measures and ways of understanding disease guided

administrative practice. In Canada, "*...Lord Aylmer, the governor-general, [established a quarantine] at Quebec under the authority of the Quarantine Act of 1795.*"

News of the spread of the disease traveled fast, and so did notices of the failure of the quarantines to detain it. This, however, did not keep governments, faced with no alternatives, from applying quarantines of the utmost severity. (Bilson, 1980:5; Pollitzer, 1959:967) Indeed, not only did cholera show the quarantines to be ineffective, but the efforts to address the disease soon taxed government and voluntary efforts beyond their limits, as well as questioning the very basis of people's understanding of the nature of disease at the time (Bilson, 1980:29, 33-34; Durey, 1979:95-96).

What do these first hesitant and overall unsuccessful encounters between Western societies and cholera as a disease tell us? First, cholera offers us an insight into the "state of the art" of medical practice at the time, and of the way these practices fit into the wider context of society. Through cholera we can gain a better understanding of both the nature and the limitations of medical practice in 19th-Century Western societies (Durey, 1979:92):

> *"One example of a course of treatment in 1832 was that given to Private Patrick Mullany of the 32nd Regiment at Quebec. When he fell ill, he hid from the doctors until he was seen to be sick and taken to hospital on 17 July at 9 am. He was bled thirty ounces, given fifteen grains of calomel [a highly toxic mercury compound] and two of opium, given a turpentine enema, rubbed with turpentine for his cramps, then given ginger tea and allowed to rest. (...)" (Bilson, 1980:161)*

Furthermore, cholera shows us the initially limited acceptance that "modern" organizations such as the hospital – now totally taken for granted as an integral part of the organizational fabric of Western societies – had at the time (Bilson, 1980:59). However, more important than simply making these phenomena evident, cholera served societies as a focus for the application of broader, socially prevalent categories to the interpretation of a variety of issues, and for the development of new categories in face of the limitations of previously valid ones. These processes are worthy, not only of general sociological or historiographic analyses (Goudsblom, 1986; Brandt, 1991), but also of a search for their specific organizational and institutional implications. In the 19th century, organizations rose as the most important way of ordering large-scale societies (Perrow, 1991; Presthus, 1962; Chandler, 1993). This meant that the development and application of systems of meaning for the interpretation of an issue

such as cholera increasingly occurred within the practical context offered by organizations, and in the institutional context of modernity (Giddens, 1990). In order to understand how this process of contextualized construction of organizational solutions to cholera occurred throughout the 19th century, I will review the cholera experience of six social contexts, as reported by the historical literature (*Cf.* van Heyningen, 1983; Pollitzer, 1959). The cases considered are Canada (Bilson, 1980), the United States (concerning especially the city of New York) (Rosenberg, 1962), Britain (Durey, 1979; Morris, 1976; Pelling, 1978), France (Delaporte, 1986), the city-state of Hamburg (Evans, 1987; Evans, 1993), and Russia (Frieden, 1977).

McMichael points out that there are important challenges and pitfalls implicit in attempting historical comparisons deriving from the incommensurability of concepts such as time in a variety of contexts (1992:351). Furthermore, as reflected in the focus of the literature used, there is also the risk of assuming the self-evident nature of the nation-state as a valid unit of analysis, due to its modern taken-for-grantedness (McMichael, 1992:356). However, by focusing the comparison upon cholera itself it is possible to minimize these limitations. As a fluid, protean and contingent phenomenon, it assumed a variety of meanings in the different contexts, both in space and through time. As a result, it is possible to compare the contexts, not in themselves, but rather as they were brought together in the contingency of cholera. This research effort is not about a simple causal model going from cholera to society or from society to cholera, but rather an attempt to draw a 'whole-picture' of the development of cholera *in* society, albeit a limited one. Further, it is a picture that is not tied to nation-states, but rather to an emergent set of categories and relations between disease and modernity.

In order for us to understand both the commonalties in the process of interaction of cholera with the development of 19th-Century Western societies, and the differences that this process showed in each specific context, I will develop the argument of this chapter in two parts. The first specifies the socio-political "issues" that constituted the setting within which the cholera experience developed in each of the cases studied. The second section of the chapter isolates six trends that characterize the interrelation of cholera as a socio-material process with the development of modernity in Europe, Canada and the United States.

Cholera and the Political Issues

As one could expect, there exists a high degree of heterogeneity in the specific instances of cholera epidemics in the countries studied. However, it is also possible to discover certain underlying trends and relationships in the variety of cases. To grasp this underlying commonalty we may consider social agents, whether they be the national government, private organizations (either for profit or voluntary), or the professions as "actors" taking part in specific "plays." The "script" of these plays was shaped by the political issues being discussed at the time cholera appeared in each country. We may recognize these scripts, first, by separating cholera as an "argument" from the political processes themselves. Second, we may separate the political dynamics into two levels: The first level deals with the short-term definition and characterization of political issues that are specific to each location. At this level cholera acts as an argument or focus for the immediate political debate. The second level has to do with a series of long-term trends that characterize the installation and development of the modern state and its specific manifestations throughout Europe and North America. Whereas phenomena on the first level were defined in the national context, the second level concerns processes occurring across national borders.

In its appearance in each country, cholera did not happen as an isolated phenomenon. Rather, within the context of these two patterns – the specificity of political issues and the installation and expansion of modernity – cholera became embedded as a focus for the advancement of positions concerning the particular issues and for the expression of modernity as a whole. Relying on the analogy of practice as text, cholera can be seen as an argument – a rhetorical device, a *text* – set against a varying range of circumstances, or *contexts*. Just as the word "cholera" means something different to a variety of people, so the set of natural phenomena and behaviors labeled "cholera" meant something different in each specific national context. In the following section I will identify the issues that specified each national context. Following this I will discuss the main trends in the expansion of modernity realized in the 19th-century cholera experience.

The specific issues

3.1.1 Canada

In Canada, the main 19th-century political issue within which cholera became embedded was the debate over immigration. Then, as now, that country experienced tensions between its two dominant ethnic groups, namely, the French and the British. A basic feature of these tensions was simply one of numbers: it was obvious that the increase in membership of one group would have implications for the other. Specifically, the French Canadians resented the continuing flow of British immigrants. When cholera hit Canada, it drew its meaning mainly from that debate over immigration. The disease was early on associated to immigration from Europe. As a result, cholera was offered as proof of the immigrants' ill effects (or lack thereof, according to which side you were on) upon Canada.

3.1.2 The United States

Three issues appear especially relevant in the case of the U.S.: the anti-government feeling, the reliance on private initiative, and the presence of corrupt local government apparatuses. Ever since its inception, the United States favored a relatively subsidiary role for government in the provision of most goods and services. Health care was most definitely not exempted from this intent, and so, together with the expanding private involvement in production, there was an increase in the role of private providers of health care. Some of the features of this model were particularly striking during the early 19th century, such as the prevalence of proprietary medical schools with little or no regulation or quality guarantees, and the abundance of alternative medical models, within which conventional Western medicine was simply one more option (Starr, 1982).

Additionally, both central and local governments were characterized throughout the 19th century by a high degree of corruption and its attending inefficiencies (*Cf.* White, 1954; White, 1958). This became more notorious with the rise of industry and its claims, both to the monopoly of production and to a greater degree of efficiency than government could achieve. Within this context, cholera became an opportunity to demonstrate (or at least argue in favor of) the usefulness of a "can do" managerial approach to social problems. In the first half of the century it would be used to show the

limitations of what had been conventional administrative arrangements. After 1866 it would become the main argument in favor of such a managerial approach, based on the success, fortuitous or not, of New York City in controlling the epidemic (Rosenberg, 1962).

3.1.3 Britain

As in the case of the United States, but on a greater scale given its relative advantage in terms of industrialization, Britain experienced tensions between libertarian and conservative political and economic factions. In addition to this, however, the British medical profession had gained a significant social position by this time, and the influence of some of its factions over government in matters of health was important. At the time of the cholera, the sanitary movement was becoming definitely entrenched in Britain as the "official doctrine" in matters of health. At the same time, there was heated debate about the causality of disease among the more academic circles of the profession (Pelling, 1978). The combination of these issues meant that when cholera presented itself in the midst of British society, it would become incorporated as an argument both of the politics of the profession and of science, and of the wider debate between trade and industry, serving both the opposing causes of libertarian and conservative politics and economics.

3.1.4 France

Nineteenth-century France was still a model of outright "class warfare," in which issues tended to be couched in terms of the mixture of hate and fear which poor and rich experienced toward each other. The peculiar dynamics that led to the Revolution, and the political consequences of that event were very much present in 19th-Century France. In this context, cholera would become both the instrument and the proof of the opposing classes' negative impact (and perceived intent) on each other (Briggs, 1961; Chevalier, 1958).

3.1.5 Hamburg

Hamburg was, to a degree, a peculiarity among German cities. Still very much an heir to the tradition of the Hanseatic league, Hamburg in the first half of the 19th century depended upon trade, within a very liberal ideological and economic frame, for

its sustenance. The debate between the liberal traders and industrial capital, within the context of the increasing Prussian imperial power, would mark the political environment of the city throughout the remainder of the century (Evans, 1993). Cholera appeared, developed and indeed flourished in the city as evidence of the material consequences of the prevailing liberal policy, which minimized government intervention on issues of public sanitation and welfare. As a result, after the catastrophe of 1892, in which Hamburg was practically the only city in Western Europe to suffer to a significant degree from the disease, cholera was quickly adopted by the medical profession, the more progressive political and economic interests and the Imperial Government as an excuse and as an argument in favor of the modernization of Hamburg's government and of an increase in Prussian inherence in Hamburg's affairs (Evans, 1987).

3.1.6 Russia

In terms of the relations between social classes, Russia in the 19th century still experienced conditions similar to those of the pre-Revolutionary France. Despite the liberation of the serfs in 1861, feudal relations would continue to be the main mode of economic production and royal autocracy the prevalent mode of government up until the October revolution (LeDonne, 1993). Against this background, the Russian medical profession in the 19th century waged a protracted and eventually losing battle against government over professional autonomy (Frieden, 1977). The example of Western professional organization served as a "promised land" for Russian physicians, tied down by the rigid government bureaucracy, and by their own bureaucratic origin and sustenance (Brown, 1983). In this context, cholera served the medical profession as proof of its worth and of the benefits of its autonomy from direct government control. Additionally, as in France, the broader elements of class conflict would be triggered by cholera as mob actions repeatedly throughout the 19th century, long after other countries had defused the riot potential of the issue.

Identifying Trends in the Development of Modernity

The value of historical analyses does not lie simply in the presentation of the features of society at a given moment. Rather, historiography is important because of the sense of direction it gives us when we follow social processes through time. I will now discuss the main trends along which the processes involving cholera developed

throughout the 19th century. In this way it will be possible to understand the institutionalization, not only of specific features of modern organizations, but also of the notion of organizations as acceptable "solutions" to social issues.

Organizations serve not only as instruments of social action, but also as repositories of social "memory." Organizational structures and processes are the more-or-less stable sediments of successive, partially overlapping modes of practice evolved over time (Powell & DiMaggio, 1991). Looking at the history of cholera and organizations shows us some of the actual processes by which such sedimentation of practices occurred. The comparison of the various accounts evinces a record of societies experimenting through trial and error with traditional and innovative organizational solutions. The recurrent nature of cholera makes obvious the two contrasting facets of this process. On the one hand, people cling onto deeply institutionalized practices, such as quarantine, that do not seem to help them in dealing with an issue (*Cf.* Powell & DiMaggio, 1991:64-65; Ignatieff, 1983:96). However, the actual development of events and the shortcomings evinced by the practices erodes these traditional practices, eventually leading to some of them being discarded. On the other hand, innovative practices are rehearsed and become institutionalized or discarded as they prove, or fail to prove, their value in dealing with the issue according to the agents' expectations.

In 19th century Europe and North America, this process of erosion-institutionalization led progressively to the development, among others, of the institutions of the health sector in the context of what may be called the "modern state." Thus, the activities relating to the successive cholera epidemics may be viewed as "exercises in modernity." These "exercises in modernity" will be analyzed as they concern the following six trends:

1. The process of centralization, whereby the nation-state gains control over local phenomena.

2. The process whereby government assumes the control of specific health institutions such as the hospital, sanitation and record-keeping on a stable and legitimate basis.

3. The corresponding divestiture of private sub-contractors of the control of such health institutions (although not necessarily of the actual performance of the activities they imply). Specifically, I will discuss the case of garbage disposal.

4. The opening up of an increasing fraction of previously private behaviors to the surveillance of government and professions.

5. The testing and increasing adoption of science as the official "ideology of causal explanations" of the modern state, and of technological solutions as its practical expressions.

6. Accompanying the previous point, the ascendancy of physicians in defining the forms (if not necessarily the contents) of health policy and politics. This has its expression in the consolidation of the institutions of medicine as a liberal profession.

Centralizing the governance of the nation state

A theme which underlies the variety of political issues and the insertion of cholera among these issues across the cases analyzed is the sorting out of relations between local and national powers in the context of the modern Western nation-state. The 19th century witnessed the realization of the model of nation-state enunciated by 18th-century political theorists, and certified after 1776 in revolutionary and independentist movements throughout the West and its colonies. An important part of that "project" implied solving the problems posed by the need to incorporate a variety of historically and geographically specific local power systems into the broader framework of the nation-state. The cholera experience is contemporary to this struggle, and makes evident at least part of the variety of organizational and political solutions suggested as ways to resolve the contrasting local and central interests.

One of the first issues that national governments encountered in facing a cholera epidemic was how to organize the performance of whatever activities were deemed necessary. As in most previous experiences with epidemics, one of the first actions was the organization of Boards of Health, both local and central. Unlike their Medieval predecessors facing the bubonic plague (Goudsblom, 1986:167-170), the

early 19th-Century states had an acute need to sort out relations between local and central governments, given the relative ascendancy that central government had gained in the context of the nation-state (Jacoby, 1973; Cf. Bilson, 1980:170).

> *"(...) a* national *and* uniform *system of public health bodies [became] essential because of the widely varying and unsystematic administrative structures which already existed in the localities. Each community relied on governing bodies which had evolved out of its own individual history during previous centuries. (...) Local government was, therefore, a patchwork affair; (...)" (Durey, 1979:78-79)*

The "patchwork" nature of local government would not have posed a particular challenge if indeed the object had not been to regularize the activities of government across that wide variety of local solutions. As a result, the initial solutions tended to constitute "two-way buffers" which allowed the historically defined local processes and the ongoing dynamics of the national level to occur in parallel and remain only loosely linked.

> *"Traditionalist and localist orthodoxies concerning the role of the State were stressed in a three-tier system consisting of the Central Board, district boards (covering the whole town) and subordinate divisional boards (covering individual parishes within a town). All sections of the local ruling elite were to be represented on the district board, while the divisional boards were to consist of a resident clergyman, a number of substantial householders and at least one member of the medical profession. The Central Board was to send new information and recommendations to the district boards, which in turn acted as clearing-houses for this information, at the same time sending back to the central authority the divisional boards' reports from the grass roots. The system was to be permissive and to emanate from local, voluntary initiative. The Central Board was to act only as an advisory coordinating body; while decision-making was to remain in the hands of the local ruling class. Recommendations were to be deliberately left vague so that the local boards, with their wealth of local knowledge, would be able to extemporize more effectively." (Durey, 1979:77-78)*

The character of such organizational solutions, in consonance with the changing structure of the state, was very much one of innovative experiments, which when found wanting tended to be either discarded or modified as the following Parisian example shows:

> In 1832, administrative and operational efforts to deal with cholera in Paris were organized into three tiers, one at the central level, another at the *arrondisment* level, and a third at the local *quartier* level.
>
> *"Thus, the city of Paris was equipped with its own highly stratified municipal health department, with the* arrondisment *commissions playing an essentially passive intermediary role. Before long it was found that the latter were redundant, since the neighborhood commissions (in each* quartier*) were more closely in touch with the*

population and could communicate directly with the central commission and the prefect of police." (Delaporte, 1986:27)

As experience was gained in dealing (successfully or not) with the epidemic, the central level tended to assert itself more clearly, even early on in the cholera experience. Central governments showed that they were willing to tolerate local activities, but only to the degree to which they would fit into the context of national policy. However, as long as central governments had no effective means of control over localities, the ambiguity inherent in this attitude continued to test their relations (Durey, 1979:79; Bilson, 1980:12-13).

That indeed mechanisms for the control of the local level by the central could be devised and implemented even at an early date is illustrated by the administration of public funds. As discussed earlier, obtaining the necessary funds with which to face an epidemic was very difficult for the smaller communities. In this, central governments found a powerful and effective strategic lever.

"Central initiative was used effectively in only one sphere, that of finance. (...) The underlying principle was still, however, that the localities were responsible for their own local costs. The privy Council was to decide which parishes were to benefit from the general fund." (Durey, 1979:98-99)

A striking late example of the development of central control over localities based on the argument of cholera is provided by the case of Hamburg after 1892. Although imperial power had to that date tolerated a large degree of autonomy of the city-state, the cholera epidemic of that year would serve to underline a series of problems latent in such autonomy. As a result, the Imperial Government would increase its inherence over the affairs of the city, specifically in and through the field of epidemiology and health care.

"[The Senate] met on 15 September with the President of the Imperial Health Office and Robert Koch in attendance as representatives of Imperial Chancellor Caprivi. The meeting proved to be another occasion for the exercise of Koch's power over the city. (...) All [his advice] was put into practice. Koch's disciple Georg Gaffky was appointed as hygienic adviser to the city at a substantial salary, (...)" (Evans, 1987:502)

This, however, did not mean that central control developed mechanically or necessarily. Indeed, *"The fate of the legislation introduced in the wake of the cholera epidemic shows that even the strong pressure exerted from Berlin was sometimes*

unable to escape being weakened, diverted, or dissipated altogether as it was filtered through the organs of Hamburg's self-governing constitution" (Evans, 1987:528-529), a trend that persists to this date in the relations between local and central authorities in the modern nation-state.

As a result, the development of organizational solutions during the 19th century in the context of relations between local and central governments was slow and tortuous throughout that period, and deeply ambiguous in its adjustment to the various requirements of these two contexts. In any case, what we see is the development of the state from the pre-modern system of patronage which articulates the center and the community *through* the local elite, to the direct penetration of society by the institutions of the centralizing nation-state (Dandeker, 1990:46-54).

The nascent public organizations would face special challenges due to their fundamentally political nature. As a result, their operation would never be far from the political issues constituting each specific context (Bilson, 1980:116-117). Indeed, in the process of political and economic centralization, not only public organizations, but also the individual agents of government, would become ready objects of criticism and attack, personifying as they did the power of the nation-state.

> *"By the nineteenth century (...) the objects of aggression had changed. It is rare to find outcast groups being attacked during cholera riots even where a feudal system was still in operation (...). Instead popular resentment was focused in the first place on the authorities, and in the second on the medical profession." (Evans, 1993:136)*

Additionally, these "public health" organizations continued to have only a fleeting existence: *"The idea that boards should operate permanently developed slowly; and without the obvious need posed by an epidemic many people were unwilling to pay for public health measures."* (Bilson, 1980:170) For the better part of the century public health agencies continued to be *ad-hoc* solutions to crises, rather than stable elements of the governmental apparatus (*Cf.* Bilson, 1980:115-116, 133, 140). In any case, however, the centralizing power of the state, and its role in articulating the framework for the expansion of capitalist enterprise was definitely increasing (Dandeker, 1990:151-152), and such a process would become manifest in health as much as it did in other fields such as communications and finance (Evans, 1993:145).

Centralizing health care

4.2.1 The hospital

Simultaneously with the trend described above, governments had become caught up in the sanitary movement (Pelling, 1978:34). Indeed, even if exiguous at first, government's role in health and sanitation was already on the rise early in the 19th Century even in the US, where government was traditionally eschewed as a means to address social issues. This became even more the case as time passed, and so Rosenberg assures as that eventually

> *"(...) the struggle of New York against cholera was carried out almost entirely by the regularly constituted municipal authorities. The same was true of Boston, Philadelphia, Baltimore – of almost every one of America's cities. (...) this seeming commonplace is not without significance. American cities were no longer hypertrophied villages, and their governments had begun to assume the powers necessary for dealing with the problems which their growth had made inevitable." (1962:91)*

The hospital was one specific instance where cholera crystallized the process of configuration of the modern state, and with it modern organizations and their location in society. Focused on the issue of cholera, (although not necessarily driven by it) hospitals haltingly began their transformation, from charity-based institutions segregating the sick poor from the rest of society, into government-run (or at least state-regulated) institutions (Starr, 1982). When cholera first visited the West hospitals were still very much outside the responsibility of government. Following tradition, in most places they were run either by religious or voluntary entities (*Cf.* Evans, 1987:359). Given the association between travel and the spread of epidemic diseases, quarantine stations and emigrant hospitals were sometimes under the control of the navy or similar institutions. However, in most cases hospitals tended to be temporary responses to epidemic crises. The initial experience with cholera was no different (Rosenberg, 1962:86-87).

Additionally, hospital personnel acted in a context of uncertainty about the causes of disease, so that hospitals tended to be viewed as harmful, rather than helpful, their impact upon the disease and the course of the epidemics being minimal and of dubious merit. Communities, especially their poorer members, feared the hospitals (Durey, 1979:92; Delaporte, 1986:36-37; Bilson, 1980:99-100).

The combination of popular fear, lack of causal knowledge and unclear distribution of responsibilities meant that the setting up of hospitals was usually conducted in an improvised and belated manner. Additionally, the magnitude of the task quickly overtook the capacity of the hospitals (Rosenberg, 1962:29; Delaporte, 1986:40; Bilson, 1980:27). This continued to be the case even after the initial experiences with cholera. Indeed, the unsuccessful first experiences with the disease probably aggravated the unwillingness to act (Rosenberg, 1962:107; Bilson, 1980:98).

Such reluctance in the establishment of hospitals reflected the difficulties inherent to the transition between the traditional and the modern hospital. Throughout most of history, hospitals had served fundamentally as means of segregation, a purpose which in the case of cholera was initially not served any differently (Bilson, 1980:14-15; Durey, 1979:90).

However, parallel with the cholera experience, and expressed through it, hospitals were to undergo the fundamental change referred to by Foucault (1975), from this segregatory function, to one integrating the concept of the clinic as the physical-architectural and functional basis of medical practice and knowledge. This transition would happen in correlation with the transformation of the economic and social structures of each society. For example,

> *"Long after 1800, hospitals in Germany cared overwhelmingly for socially disadvantaged people such as the chronically ill single labourer, the prostitute and the pauper, the old without a family to look after them. Most patients were supported by poor relief. The middle classes and as far as possible the petty bourgeoise paid for home care. They avoided hospital treatment because there was no separate accommodation for them apart from the mass of poor patients. As time went on, the hospitals served increasingly as places where physicians and surgeons could receive practical medical training and experiment with new treatments." (Evans, 1987:333)*

Similarly, as late as the 1860s, providing hospital space for cholera victims in New York city was still a matter of contention that had to be resolved on the spur of the moment: "*Barracks were secured from the secretary of war for possible use as a hospital (though a cordon of police had to be provided to protect the barracks from violence).*" (Rosenberg, 1962:205-206)

Cholera made evident the shortcomings of a form of hospital organization not in line with the trends of urbanization and an expanded role of government in health

policy in the modern state. The degree of autonomy had by the old charity or voluntary hospital made it an obstacle when facing urban disasters of the kind increasingly visiting the industrializing West (Bilson, 1980:124). This would eventually lead to the regulation of the hospital by government, if not to its direct control (Evans, 1987:528-529).

The incorporation of medical practice and hospital care, the increasing demands of industrial production for a moderately healthy work force, and the decrease in social and family support for the sick induced by urban and industrial life would all contribute to make the permanent, professionally staffed, clinically based hospital a fundamental organization in modern health care.

4.2.2 Sanitation

The development of the sanitarian movement during the first half of the 19th century is perhaps one of the most written about health-related phenomena of the period. Cholera historiography has not escaped this interest, and the reason is obvious. Just as cholera was ravaging the West for the first time, the sanitarians had arrived at positions of influence in the governments of the metropoles (Goudsblom, 1986:176-180; *Cf.* Pelling, 1978). However, the coincidence between the cholera visitations and the rise of sanitarianism has been interpreted from acutely contrasting positions. While some authors have pointed out that cholera acted primarily as a distraction from the promotion of public sanitation (Pelling, 1978:6), most see the disease as a motor for sanitary reform (Bilson, 1980:114-115), both within and beyond the limits of the nation-state.

> ***"Cholera was the great disease of the nineteenth century, and its history is to a very large extent the history of the growth of sanitary reforms and of the first gropings of nations to unite in resisting the threat of epidemics that made a mockery of national frontiers." (Howard-Jones, 1972:432)***

The question of the relation between cholera and sanitarianism is fundamentally linked to the "false debate" about the relation between cholera and social change alluded to at the beginning of this chapter. It is a crucial issue, given the influence of the history of cholera and the "technical" interpretations of it (*Cf.* Pollitzer, 1959) on the "collective consciousness" of the medical and public health communities. Thus, it is

frequent to find causal assumptions relating cholera and sanitary reform in the interpretation of contemporary epidemics of cholera.

> *"In the 19th century, the sanitary reform movement in Europe and America was largely spurred by fear of recurrent epidemic cholera and ultimately conquered the disease. Now is the time for Latin American countries to make a similar transformation." (Tauxe & Blake, 1992:139; Cf. Siméant, 1992:218)*

It was in government and through government that much of the sanitarian project – whether causally related to cholera or not – was advanced. Thus, interpretations of the role of cholera in the 19th century sanitary movement usually relate back to the activity of government (or to its lack) (Rosenberg, 1962:2). In order to overcome any unwarranted assumptions about the causal relation between cholera and sanitary reform we must examine the actual features of government involvement in sanitary initiatives as related to cholera throughout the 19th century.

As pointed out before, the arrival of cholera in Europe coincided, especially in the case of Britain, with the rise of the sanitarians to positions of influence in government. As a result, when cholera broke out, action against it tended to be articulated in sanitarian terms, even when these were still rudimentary (*Cf.* Delaporte, 1986:33).

> *"The* Examiner *provides no evidence that Chadwick had at this stage evolved his full circle of sewerage, continuous water supply, and agricultural improvement, or realized the whole extent and economic importance of the ordinary incidence of fever, presumably because he had not yet investigated these matters for himself." (Pelling, 1978:31-32)*

Initial government actions were characterized by ambiguity and uncertainty, both about the nature and value of activities to be performed, and about the relevance of the legal framework within which such activities could be undertaken. Indeed, Durey (1979:205-206) suggests that very little sanitary reform evolved from the first epidemic, given the lack of understanding about the relations between disease and social conditions (*Cf.* Durey, 1979:79; Bilson, 1980:170; Morris, 1976:59-60).

As is frequently the case, the law evinces the limitations and challenges faced, and the transformations undertaken by societies when incorporating a new problem into the field of their attention under conditions of uncertainty. The problems and progress of the sanitary movement in government are similarly illustrated by changes in the law.

> *"To the credit of the Central Board of Health they had quickly become aware of the massive physical problems which beset the local boards, and from January they insistently told the Privy Council that new legislation was indispensable. It is possible that they would never had been heeded if it had not been for the outbreak of cholera in London in February 1832. [Even so] (...) the cholera Prevention Act was brief but had all the hallmarks of a panic measure." (Durey, 1979:887)*

As the quotation suggests, existing legislation was "put to the test" by cholera, and the initial results did not necessarily translate into new laws, given the lack of an interpretive framework within which to understand cholera in Western societies in the 1830s (Bilson, 1980:66). Thus, even when "*(...) cholera brought changes in the framework of law in the provinces it, alone, could not change attitudes on public health or the treatment of the poor.*" (Bilson, 1980:113)

Despite the difficulties faced, the sanitarian perspective did expand through the cholera experience. Even if, as Pelling suggests, sanitarians did see cholera as distracting efforts from their project, they promptly incorporated the issue as an argument in their favor, as much by denial as through affirmation:

> *"Sanitarians wanted to avoid cholera (...) [blotting] out the new awareness of the true problem, which was the mortality suffered* constantly *by the labouring population because of the prevalence (which had been, it was alleged, of epidemic proportions since 1838) of 'fever'. Above all, Chadwick wished to prevent any reversion to quarantine procedures. Therefore, he and Smith set about systematically to compress cholera into the existing class of preventable diseases - a move 'purely practical' in intention, but leading inevitably to theoretical responsibilities." (Pelling, 1978:47)*

As a result, it would increasingly be the case that sanitation was seen as a reasonable, and later on a necessary move in the fight against disease, not just of the epidemic variety, but also of the endemic kind.

> *"...Viscount Morpet himself emphasised that the purpose of the Public Health Act of 1848 was not to dispel a 'transitory visitant' but to control 'the abiding host of disease, the endemic and not the epidemic pestilence, the permanent overhanging mist of infection, the annual slaughter doubling in its ravages our bloodiest fields of conflict'." (Briggs, 1961:91)*

The participation of government was crucial in this intent, as it would lend sanitary efforts the long-term stability that they required, both through the enactment of law, and in the execution of the activities specified by such law (Bilson, 1980:122). As time passed, the use of cholera as an argument would continue to expand, supported

as it was by the medical profession, and lending credibility to governmental intervention.

> *"(...) in most places the epidemic was regarded as a universal lesson in the need for public health. Where endemic disease and statistics relating to it – including the terrible differential mortality statistics – could not convince people of the gravity of the problem of public health, cholera could. As a writer in the* Edinburgh Review *put it in 1850, 'Cholera is in truth a Health Inspector who speaks through his interpreter, the Registrar General, in a language which reaches all ears'." (Briggs, 1961:85)*

This, however, does not mean that the sanitarians' vision of government expanded unabated everywhere. Indeed, as I have attempted to argue previously, the development of the issue of cholera and its relation to, in this case, sanitary reform, was a process that occurred in intimate relation with the ongoing political and economical processes in each specific location. Thus, in the 1860s and 1870s, in most of Western Europe government intervention in sanitary issues was well on the way to acceptance: *"...not least thanks to this process of 'medicalization', medicine and health had become political issues in most western and central European countries."* (Evans, 1993:145-146). Indeed, even Russia was experimenting with an expanded government role in sanitation, through the inclusion of health care as one of the responsibilities of the newly created zemstvos:

> *"By the end of the 1870s the zemstvos had established an innovative program of free rural health protection, 'zemstvo medicine,' and had been entrusted with expanded jurisdiction over public health." (Frieden, 1977:540-541)*

However, at the same time, the new Canadian confederation was distancing itself from the responsibility for public health:

> *"In the newly formed Confederation after 1867, the responsibility for public health became more diffused. (...) There was no central body which could co-ordinate public health action. The new nation made no provision for a body even as temporary and feeble as that of the central boards of health which had been created under the act of 1849. Each province made its own provision, and in Ontario the first public health act was passed in 1873, the year of the last great cholera epidemic in the United States and the last major scare in Canada." (Bilson, 1980:140)*

Yet, the tide had changed, and these were but local fluctuations in an established trend toward an enlarged role for government in sanitary affairs.

4.2.3 Record-keeping

A further trend for which cholera acted as a focus was the tendency towards the "quantification" of social life, a development that was related to the state's growing effort at control through the fragmentation of reality into specialized compartments (*Cf.* Dandeker, 1990:147). Statistics rose to prominence both as a mode of representation and of understanding, and as a guide to intervention. It was quantities in populations, rather than qualities in individuals that became the objects of description (Foucault, 1975). Furthermore, scientific analysis and practical matters of administration would both be focused on the condensation of data in numbers and their statistical representation. The medical field stood in the middle of this transformation, which would itself give rise to specific organizational solutions and shape the terms in which disease would be discussed henceforth.

Delaporte refers that, even without any clarity about immediate causes, it was studies relating cholera to population densities at the "microgeographic" level and to occupation, income and associated living conditions that suggested the importance of social and economic factors in the spread of the disease (Delaporte, 1986:74-78). Similar developments occurred across the Atlantic, where "*[s]tatistics were becoming the reality of science.*" (Rosenberg, 1962:153) As a result, not only did statistics provide an ongoing picture of the spread of the disease through the publication of more frequent epidemiological information, but also became themselves the touchstone of the validity of proposed explanations and treatments, as gauged by the epistemological canons of the time (Howard-Jones, 1972:423; *Cf.* Pelling, 1978:82).

As the role of government expanded in society, so did its participation in both the generation and the use of such numerical data. Organizations were constructed to deal explicitly with the recording and publication of information that would feed the statistical process. Not only did these organizations evince the new scientific mindset, but they also expressed the political dynamics involved in the configuration of the state's apparatus and, significantly, in the process of centralization (Pelling, 1978:81). Indeed, records and statistics would become arguments in favor of a pivotal role for the state and its organizations in the resolution of the problems of European society at the time (Briggs, 1961:85, *Cf.* Perrow, 1991). Again, a similar process would occur across the Atlantic (Bilson, 1980:157).

As recording became incorporated into the functions of the state, it served not only as a focus for the overall operation of the political process, but also as an expression of the politics of each specific site. Not only did statistical recording become a task for government, but it became both an object and a part of the language of politics. As a result, the vicissitudes in the institutionalization of the recording function would reflect upon political issues (Bilson, 1980:133) and the publication or withholding of data and information would become statements of policy in themselves:

> *"(...) it was undeniable that Kraus and his officials were publishing grossly underestimated statistics. At noon on 6 September, for example, the Senate announce that there had so far been 6,798 cases and 2,940 deaths up to that point. A week later, these figures had been revised to show that a total of 11,424 people had caught the disease by 6 September and 4,900 had died of it. (...) over 40% of the total [of cases and deaths], had been omitted from the official statistics (...)" (Evans, 1987:382)*

Expanding the public sphere I: Infrastructure (the case of waste disposal)

The 19th century stands as a crossroads at which the expansion of the nation-state, informed by political and economic liberalism, met the consequences of urban and industrial living. Consequently, societies would have to address the tension between the desire for a minimal, non-interventionist state, and the need to guarantee certain functions necessary to social reproduction in a massive society (Perrow, 1991). One such function was the disposal of solid wastes (Evans, 1987:176). As has been pointed out before, initial responses to cholera were molded on traditional practice, especially that gained from experiences with the plague and other vector-transmitted diseases such as yellow fever.[1] The elimination of filth was a basic component of that traditional practice (Rosenberg, 1962:22-23; *Cf.* Delaporte, 1986:32).

Furthermore, rooted in the long-term development of a "delicacy of feelings" characterizing the modern condition (Norbert Elias, *quoted in* Goudsblom, 1986:162), the expanding sanitary movement held as one of its fundamental tenets the promotion of personal and social cleanliness. Indeed, for the sanitarians, *"(...) the option of attacking 'the most powerful and general' causes of disease, in the shape of drains,*

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[1] Or rather, what would later on be found to be vector-transmitted diseases

stagnant water, and accumulated organic filth, was clearly reasonable from every point of view." (Pelling, 1978:31-33)

As a result, efforts at waste disposal were almost universally among the first measures taken by both local and central governments to counter the cholera: *"Boards of health, once the disease was upon their communities, had to concentrate on removing what might be the physical causes of the disease."* (Bilson, 1980:34) However, a diversity of problems conspired against this intent. In terms of the actual practice of eliminating filth, one possible strategy was the recruiting of voluntary help in times of need. Indeed, this was an important means of complementing government activity, as has been discussed above (*Cf.* Rosenberg, 1962:82). However, voluntary work had important limitations in its origin as a crises response and in the tendency of participation to diminish as people became accustomed to the disease. A further problem to which voluntary work was an answer, albeit an imperfect one, was the lack of funds (Rosenberg, 1962:117).

A second option in dealing with filth was the provision of waste disposal services by private contractors. This alternative also brought problems, due to the political dynamics that frequently operated between governments and their private subcontractors.

> *"Nowhere was the inadequacy of traditional practice more apparent than in the contract system of street cleaning. The contracts were political manna and it was assumed that the contractor would make no more than token efforts to fulfill the duties which he had agreed to perform. (...) When during the cholera epidemic several of the contractors were forced to actually clean the streets, they begged to be released from their contracts, pleading that they could not fulfill them without incurring grave financial loss." (Rosenberg, 1962:111-112)*

Given the conditions of increased waste production without a corresponding institutionalized solution, it is easy to see that a cholera epidemic and the responses devised against it could, and did, precipitate crises, as *"[t]he garbage contractors were suddenly obliged to cart away much more than usual, particularly when houses were cleared out by the disinfection columns (...)"* (Evans, 1987:366; *Cf.* Delaporte, 1986:36-37) However, the effect of each of these crises in terms of overall institutional reform was minimal, given the structural nature of the problem. Indeed, cholera epidemics

would come and go, and sanitary conditions, given the impromptu nature of responses, would remain unmodified (Evans, 1993:144; *Cf.* Bilson, 1980:60-61, 77).

This would slowly change as a result of the convergence of two sets of factors. On the one hand, urban industrial production was expanding. This implied an increase in the peculiar requirements of industry in terms of a relatively healthy, productive and politically stable work force. It also meant that squalor and affluence were increasingly found in close apposition. As a result, sanitary reform increasingly appeared to the wealthy as much as a matter of self-preservation as of choice. (*Cf.* Rosenberg, 1962:21) On the other hand, as the sanitary movement expanded, it offered arguments of costs and benefits which addressed these requirements of industrial production and urban life (Bilson, 1980:171-172; Evans, 1987:118).

Change would come eventually, not as the mechanical result of cholera, but rather as the dynamic consequence of the interaction between economic, political, and biological/material processes. The institutionalization of the state, specifically of its organizations, as a coherent solution to the divergent conditions of modernity would occur slowly and unsteadily. However, it would prove to be an irrevocable process (Rosenberg, 1962:207-208; Pelling, 1978:296).

Expanding the public sphere II: The surveillance of individual health

In a previous section I explored, through the theme of centralization, how the 19th-Century state increasingly expanded its influence all the way to its geographic and administrative limits. Additionally, as the power of the nation-state grew, so did its control over a broader range of components of daily life. The surveillance of health was one such area. This section will discuss the means of extension of the state's inherence into the actual lives of its population, as it occurred in the case of cholera. Specifically, it will reflect on the association of public health and public safety implied by the term "sanitary police."

The notion that law and order, health and economics were somehow associated was not new to Europe in the 1800s. Indeed, it was an association that had its roots in 17th-century thought (Delaporte, 1986:66). As a result, when cholera first arrived in the

West, it was natural to resort to this interpretive framework in the design of government responses.

> *"For reasons of public health and public safety, therefore, the government felt bound to take action: 'The government must be constantly on the alert to protect the population against any threat.'" (Delaporte, 1986:64)*

Additionally, sanitarianism – also a creation of the 17th century – offered in its rise to political and intellectual preeminence both a theoretical and an empirical basis for the association of health and safety. Edwin Chadwick, the most prominent sanitarian in Britain at the turn of the 19th century, would perceive "*(...) a parallel between crime and disease, and may have been led to an independent awareness of the existence of 'fever nests' – 'ghettoes' occupied only by the poor, in which there was a constant incidence of fever – through his analysis of police reports.*" (Pelling, 1978:31) Indeed, at a time when political and economic liberalism was still very much the norm, sanitarians were criticizing "*(...) Government's continued lack of responsibility for the preservation of the public health.*" (Pelling, 1978:32)

However, in the course of the 19th century this association between health and safety was to suffer profound changes. On the one hand, these changes had to do with the *extent* of the association. The 19th century saw the realization, in the field of health, of the full potential for compulsion implicit in the new structures of the nation-state (*Cf.* Dandeker, 1990). As the state continued to expand, so did the resources it could make use of, and accordingly the capacity it had to intervene in the lives of the people (Evans, 1993:136).

On the other hand, more than just in its extent, the relation between health and safety was significantly modified in its *means*. In the early 19th century, the police function of the state was openly coercive, based on the overt exercise of power.

> *"The health wardens were the police force of the board. Each was given a sign to nail up outside his house and a silver badge engraved 'Health Warden/Gardien Sanitaire' to be worn around his neck on a red ribbon. Thus identified they set out to enforce the public health regulations and to 'denounce delinquents' so that penalties could be invoked. (...) If they met resistance, the wardens could call on 'all Constables and other officers' for help." (Bilson, 1980:17; Cf. Evans, 1987:99)*

It soon became evident that this approach to social control by the state elicited strong and uncontrollable reactions from the population (*Cf.* Ignatieff, 1983:88-89).

Additionally, the success of capitalism, especially in its industrial form, brought with it the "menace" of a closely-knit, organized work force that would be increasingly unwilling to accept overt forms of control (Evans, 1987:79). A frequent (although in no way necessary) corollary to the combination of this industrial labor in conditions of urban squalor, and the consolidation of a focused, easily visible central government was the explosion of riots in response to the disease, particularly during the first epidemics. Sanitary policing, as one of the more obvious and intrusive of government efforts, elicited much hostility (Bilson, 1980:35).

As a result, save in cases where "*(...) bureaucratic inertia ensured that policing methods continued*" (Evans, 1993:141), the approach to sanitary policing tended to become much subtler as experience with cholera increased. This did not mean that surveillance was abandoned. Rather, it meant that the means of surveillance changed, in order to obtain the desired end of control despite changes in the political dynamics of Western societies. On the one hand, the state had to deal with challenges from the poor and working classes (Evans, 1987:90-95). On the other hand, extending the rule of sanitary police also required developing a certain autonomy with respect to *all* members of society, and a corresponding "equality before the administration." The problem was that "*[t]he 'better sort' might accept the need to keep an eye on the poor but resented an eye being turned on them.*" (Bilson, 1980:123)

As a result of these two challenges, change would have to come in the means of surveillance, for governments could no longer afford to impose themselves upon the lives of the poor with the impunity with which they did previously, nor could they consider such traditional means with respect to the elites. Realizing this intent was not an easy battle however, especially concerning the wealthy and powerful (Evans, 1987:518-519).

There were two important consequences to the expansive intent of the state. The first of these was bureaucratization. The state would have to rely on increasingly complex inter-bureaucratic relations in order to perform the multiple tasks involved in coercing, persuading and cajoling all segments of society into conforming with sanitary policy (Evans, 1987:100):

> *"Such determined and vigorous activity implied careful organization. Fortunately for the board, its administrative problems were immeasurably lightened by the co-*

> *operation of the metropolitan police. Not only did police officials offer the use of office space, they organized as well a special 'sanitary detail' of picked officers to help in enforcing the board's decisions. The police telegraph and messenger service were also at the board's disposal. Each police precinct, moreover, maintained a 'complaint book' in which the complaints of private citizens could be made. (...) At the end of each day, the complaints were forwarded to the office of the Sanitary Superintendent." (Rosenberg, 1962:202-203)*

The second consequence was the increasing reliance on scientific explanations as the "official ideology of causality," and more specifically on the knowledge of the medical profession. The state's relation to the medical profession and its distinctive knowledge would change as this knowledge changed. Physicians were involved in the issue of cholera very early on. However, their early role was a relatively straightforward one of implementation. Indeed, early medical knowledge stood in an instrumental relation to sanitary policy:

> *"Of greatest importance (...) [in 1832] was the role of the physician. It was he who gathered information about sanitary conditions in the homes he visited. In addition, he was empowered to issue ration coupons for food." (Delaporte, 1986:39-40)*

With the development of powerful causal explanations, medical knowledge evolved from this instrumental role to a substantive one. Physicians no longer simply realized policy, but rather, provided it with its fundamental logic:

> *"The general, if uneven withdrawal of the state from the [overt] policing of epidemics that characterized the half-century after the arrival of cholera on the European continent ended with the rise of bacteriology and the discovery of the agent of the disease, the 'comma bacillus', by Robert Koch in 1884." (Evans, 1993:145)*

The effect that this had upon surveillance was fundamental. Government efforts at control of behaviors were no longer effected upon an undifferentiated mass of people, as was the case in the early *cordons sanitaires* and quarantines. Rather, the focus of influence was the individual's personal behavior. "*Instead of controlling all traffic, Koch implemented tight control and treatment of cases identified outside Hamburg to stop spread.*" (Evans, 1987:373-374 The long-term result of this tendency was the "privatization" of health. People were made increasingly responsible for their own health, both in relation to treatment and as concerned prevention. The contemporary preoccupation with fitness, a healthy diet, and smoking, whereby society places the costs and responsibility of prevention directly upon the individual through the

modification of personal life-styles, might be seen as the heir to that privatizing intent. It is control without a controller.

Developing an ideology of causal explanations

It was during the 19th century that science finally obtained widespread recognition as the preeminent means for the discovery of "truth" in the West. On both sides of the Atlantic religion was rapidly loosing ground to science in the field of explanation. What had started in the 18th Century as a philosophical distinction between the mind or spirit and the body (Toulmin, 1990) would end in direct confrontation between science and religion in the mid 19th Century (*Cf.* Rosenberg, 1962:125ss; Morris, 1976:130). Health and health care constituted very obvious places for the expression of this confrontation. Indeed, as Foucault has argued (1975), it was in the late 1700s and early 1800s that a specific invention of modern thought – clinical medicine – would provide the "conceptual heuristic" with which European physicians would manage to address disease in the body in a manner that appeared both logically and empirically superior over other approaches to medicine and other approaches to health (Delaporte, 1986:116). Associated to the intellectual liberty that this new practical epistemology provided was a change in the means for the practice of medicine. Whereas previously the care of the sick relied fundamentally on the personal communication between physician and patient, increasingly this contact would be mediated through technology, first diagnostic, later therapeutic (*Cf.* Foucault, 1975). Previously it had been theories that defined limits, now it was technological development that appeared as the condition establishing the boundaries of performance (Pelling, 1978:151).

As in the other areas discussed above, cholera was here to provide both a focus for ongoing activities and a testing ground for innovations in ideas and practices (Delaporte, 1986:197). The issue of the relation between (medical) science and cholera is not simply, as the more naïve interpretations of the history of cholera would have it, that the disease was "*(...) at the base of historical progress in medicine (...)*" leading miasmatist theories to be toppled over (Siméant, 1992:217-218). Neither was it that

cholera naturally differentiated "true science" from "fanciful theories," as Pollitzer suggests in judging history with the benefit of hindsight:[2]

> *" The only consoling feature amidst the calamities caused by the infection in 1854, one of the worst cholera years on record, was that observations made in England clearly showed, to those who were not obsessed by fanciful theories, that contaminated water played a major role in the spread of cholera and that consequently a supply of safe drinking-water was of cardinal importance in the prevention of the disease." (Pollitzer, 1959:30)*

Rather, it was in cholera and through cholera, as understood by the 19th-century actors themselves, that contrasting interpretation of the issue – both the "fanciful theories" and what now pass for valid explanations – became expressed and realized. What currency any given interpretation of the disease had at a given moment depended upon a broader set of circumstances and relations that characterized the "audience" that it reached specifically (*Cf.* Morris, 1976:214):

> *"(...) what [the contagionists'] pronouncements lacked was not so much authority as* response. *And response was precisely what the pronouncements of the Parisian doctors did not lack: what they said was heard* loud and clear. *This was because the idea of infection, which they championed, resonated with the concerns of government administrators. The needs of medical technology converged with the needs of political reform. Hygienists, philanthropists, administrators, and property owners all demanded the elimination of sources of infection. The battle against filth and poverty, the most visible causes of the epidemic, was not only a medical but also a political and moral necessity." (Delaporte, 1986:175-176)*

This suggests that while the efficacy of scientific explanations, in this case specifically of the germ theory, did much to sustain their legitimacy, it was not solely responsible for their original rise to importance. This can be seen in the case of cholera, where the explanations of Western bio-medicine were afforded a preeminent position in relation to government policy long before physicians could defend their claims to the monopoly of medical truth with any confidence (Bilson, 1980:150). Certainly, it was not

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[2] "We must not be too proud to reconstruct the rhetorical contexts in which people decided *for themselves* what was important in each debate. Some of their scientific interests may coincide with ones that are still acceptable to 20th-century philosophers of science: if so, well and good. Others are of the kinds that a 20th-century positivist might be ashamed to acknowledge, e.g., *the desire to give astronomy its lost* 'cosmopolitical' significance: in that case, so be it. Anything that people of Leibniz and Newton's calibre *saw as* at stake in their inquires, surely *was* at stake in their inquiries: rather than tell them their business, we should ask, 'Why did the situation there and then make these *un*positivistic interests so weighty and important?'" (Toulmin, 1990:86; author's emphases)

the methodological rigor at the base of a theory that guaranteed *per se* the survival of that theory: As Pelling points out, "*[The cholera-fungus theory] (...) was not opposed by better or more thorough research. Instead, research of a lower standard won greater respect. Institutional factors were important, as much in the origin of the theory as in its trial and defeat.*" (1978:306; *Cf.* Toulmin, 1990:117-129)

Indeed, what the 19th-century cholera experience revealed, more than the intrinsic power of scientific explanations, was the early association of the medical profession and its specialized knowledge to the institutions and organizations that shaped public policy. As early as the first pandemic professionals, particularly physicians, were present in organizations such as neighborhood commissions in Paris, and were empowered to *"investigate, observe, and take action"* (Delaporte, 1986:27-28). Such was also the case in Britain (Durey, 1979:77-78).

The story of cholera in the 19th century illustrates the expansion of this role, on the one hand, as government increasingly recognizes and relies on the medical profession's expertise, and on the other as the profession actively enlarges its field of competence in society. The significance of the growing reliance of government on medicine is exemplified by the scientific council set up in Britain in 1854, an early case of direct support by the British government for scientific research (Pelling, 1978:222).

Cholera would serve science and medicine as an argument in favor of the legitimacy of their expertise, as the medical profession claimed responsibility for what successes there were in the fight against the disease. In the United States, people accepted the medical profession's claims to having avoided a new catastrophe in 1866 (Rosenberg, 1962:192). The same would happen in Russia after 1892, where the profession was especially aware of the need to overcome its low status.

> *"By the end of 1893, abundant evidence showed that the medical profession, either in cooperation with the local self-government or through local medical organizations, had performed effectively. (...) Many factors caused the radical improvement, but the medical profession and the zemstvos gladly took the credit. (...) The epidemic had presented the profession an unusual opportunity: having received broad emergency powers, it had proved its capabilities and transformed its role. Physicians lost no time in capitalizing on their sudden advantage, using the situation to legitimize and maintain their newly gained influence." (Frieden, 1977:551)*

What the 19th century witnessed, then, was the overlapping of two processes. First, there was the assimilation by government (or more broadly by the state) of the intellectual instruments of the medical profession in relation to health and disease (*Cf.* Rosenberg, 1962:27, 84; Delaporte, 1986:23). Underlying this there was the oscillating development of medical theory within the limits of the profession. The result was an apparently "granular" and irregular distribution of theories and institutions across different societies, responding to the specific histories of each site. At any given moment there was a variety of contrasting theories and approaches to disease being applied in different nations. However, the constant was provided by the permanent intention, both of the state and of the medical profession, to incorporate each other's efforts as arguments in their own favor. Cholera simply made this obvious as a crises that precipitated change in the profession, the state, or both, at different rates.

In the early 19th century, for example, as cholera first hit Britain it required the sanitarians to exert themselves in strengthening their positions in the British government by "*(...) systematically (...) compress[ing] cholera into the existing class of preventable diseases,*" in order to avoid it erasing "*(...) the new awareness of the true problem, which was the mortality suffered constantly by the labouring population because of the prevalence (...) of 'fever'.*" (Pelling, 1978:47)

Although in a different historical and geographical context, the same process of "compression" of cholera into an argument is visible in Hamburg after 1892. As cholera precipitated changes in the state and the profession in Hamburg, "*[the merchant oligarchs] were faced with the fact that their own leading medical officials (...) no longer opposed Koch's views (...). Koch, together with Pasteur, had succeeded, one might argue, in establishing a paradigm (...) which could serve as the organizing principle for research (...).*" (Evans, 1987:503)

Thus, in any case the result was the same: the progressive incorporation and institutionalization of medical explanations as "official doctrine," and the installation of organizations such as bacteriological laboratories, epidemiological societies, or modern hospitals (Evans, 1987:530; Pelling, 1978:99) that would reproduce that doctrine within, or at least in relation to, the apparatus of the state (*Cf.* Pollitzer, 1959:39; Briggs, 1961:85; Pelling, 1978:152-153).

The ascent of the medical profession

The 19th-century cholera experience gives us evidence about the process whereby the medical profession incorporated into its field of competence an increasing part of the life of society at that time. The history of the medical profession in the 19th century is in the main the history of its institutional consolidation. What the medical profession was doing in all of the countries discussed was, without exception, attempting to establish or to reinforce the organizations and social relationships that would ensure its autonomy, its institutional reproduction and its political influence in the context of the nation-state (*Cf.* Starr, 1982; Abbott, 1988). This process was, of course, modulated by the political and economic peculiarities of each specific situation. Whereas in Britain and France the process was well advanced in the early part of the 19th century, the Russian medical profession would only find a measure of autonomy during the 1870s, and even this would be lost again after 1900 (Frieden, 1977:553). In the US and Canada, with their relatively weak academic base, professionalization would also be late in coming, and physicians would face a significant challenge from alternative providers of health care.

Both the process of professionalization, as a constant, and the variability deriving from the dynamics of local politics and economics were expressed in the encounter between cholera and the medical profession. These two root processes – professionalization and local politics/economics – came together in the shape of a debate, of which we still hear the echoes, between "the technical" and "the political" (Bilson, 1980:87-88; Delaporte, 1986:11).

On first appearances it might seem that the profession was attempting to free itself from the political process. For example, the *Lancet*, a medical journal that "*represented the most radical claims of the general practitioner for professional recognition*" criticized the Central Board of Health in Britain at the time as composed of "*drones, sychophants and courtiers*." At the time of the early cholera epidemics its editorial policy materialized the opposition between a technocratic interpretation of authority, and the government's interpretation of authority based on "statesmanship," an 18th-Century concept that included social prestige, birth and connection, as well as practical ability. (*Cf.* Morris, 1976:34, 26) However, rather than disengage itself from politics, what the profession was attempting to do was to restate the political process in

terms that would put its specialized knowledge at the root, not only of the interpretation of health issues, but also of the specification of actions with which to face them. For example in Hamburg, as I have pointed out above, the early experience with cholera led the intensely liberal state to abstract itself almost completely from the prevention and combat of the disease (Evans, 1987:251). If indeed the profession had wanted simply to monopolize technical knowledge, this would have suited it perfectly. However, the story of the relations between the profession and the merchant elites in Hamburg belies such an interpretation:

> *"(...) the influence of Hamburg's liberal ideology was to some extent countered by the fact that the doctors, as academically qualified professionals, themselves belonged to Hamburg's dominant classes. The demands of the medical profession could not simply be dismissed as the demands of lowly artisan guilds might be." (Evans, 1987:210-211)*

The profession was not contented simply with enacting health policy. Rather, it seeked to inform and direct such policy (*Cf.* Frieden, 1977:539). However, in the early 19th century the profession had to face the limitations of its therapeutics. Although its knowledge base was quickly expanding, it could not offer any particularly effective solutions to the problem of cholera. In this context, it resorted, on the one hand, to pre-existing frameworks of interpretation, such as those derived from the experience with the plague (Evans, 1987:231-323), and on the other, to the development of a pragmatic approach to disease. As Pelling suggests, "*...the main product of mid-nineteenth-century epidemiology was a kind of compromise; not essentially an area occupied by moderates and the non-committal, but an intelligent position consistent with interest, experience, and methodology alike.*" (Pelling, 1978:310)

Thus, the objective was not simply knowledge-in-itself. Rather, it was knowledge for control. The previously presented example of the British sanitarians "compressing" cholera into the category of fever is another case of the same phenomenon. It was eminently sensible to take simultaneous advantage of the leverage provided by the cholera crisis, preexisting knowledge, and organizational circumstances in order to advance the sanitary cause, rather than give up on the project for lack of a precise "scientific" understanding of the disease.

In the first half of the 19th century the profession was living in a watershed period, when its public inherence was increasing, but the control of its juridical,

intellectual and material resources was still to be consolidated. As a result, it faced tensions both with government and with society, such as those illustrated above (*Cf. also* Morris, 1976:160). These tensions translated as difficulty in the performance of its tasks (Morris, 1976:59-60). For the same reason, physicians in the US saw their legal support vanish in the 1840s and 1850s. In this highly competitive environment, many states repealed regulatory legislation which had previously excluded alternative practitioners of medicine, as the profession proved unable to substantiate with practical success its claims to "truth" (Rosenberg, 1962:155; *Cf.* Starr, 1982).

There were other expressions of this tension between the practice of the profession and its claims to knowledge. On the side of knowledge, as the profession attempted to close itself and its field of competence from public scrutiny (*Cf.* Pelling, 1978:169-170), it entered into conflict with government, bent at the time, as we have seen, on expanding its powers of surveillance (Bilson, 1980:116). On the side of practice, as the profession gained public prominence, it also placed itself in a position of vulnerability, as testified by the early mob actions against physicians all over Europe and across the Atlantic during the first epidemics (Frieden, 1977:544; *Cf.* Delaporte, 1986:54-56; Evans, 1993:136).

As a result, the medical profession faced a complex task in reinforcing its position in society. This task was partly ideological, as suggested by the promotion of the concept of "medical police," a notion that simultaneously expanded medicine's role in the interpretation and control of health, improved the profession's standing, delegitimated competitors, and appealed to the modern industrial state's need for a restrained but numerous and healthy population (Evans, 1987:206-208).

Additionally, it was an openly and consciously contextualized political task, addressing the specific political issues in each place and time. In early 19th-century Hamburg, for example, it meant resonating with the ideals of liberalism (Evans, 1987:244). Fifty years later, in the same location, it would mean corresponding to the interests of Prussian imperialism, as illustrated by Robert Koch and Georg Gaffky's inherence in the affairs of Hamburg after 1892 (Evans, 1987:268-269, 503-508).

Further examples are provided by Canada, where throughout the 19th century the political contextualization of medicine would imply dealing with British immigration

(Bilson, 1980:141), and by Russia, particularly after 1870, where it would mean distancing the profession's work from its government affiliation in order to expand its acceptance in the wider social context (Frieden, 1977:548-549).

Finally, the task of establishing the profession's position in society was also pragmatic. Specifically, it meant taking over positions in the institutions directly involved in the battle with cholera. Especially relevant examples of this were the Boards of Health (Durey, 1979:77-78; Rosenberg, 1962:84; *Cf.* Rosenberg, 1962:27).

In sum, the uniqueness of the process of professionalization would be realized in the variety of the specific political situations. The end, control of knowledge and of a professional field (Abbott, 1988), remained the same, but the means to achieve it were defined in practice. Certainly, specific actors and positions substituted each other on the strength of the success of their theories in explaining issues, but also based on the coherence they exhibited with larger ongoing social concerns and preconceptions. Whereas Thomas Latta's intravenous fluid therapy would be rejected in the 1830s despite its efficacy (Morris, 1976:166-167; Durey, 1979:129), infectionism would successfully displace contagionism as "official doctrine" around the same period. Similarly, John Snow's explanation of the spread of cholera continued to be strenuously resisted in some quarters as late as the 1870s (Howard-Jones, 1972:431), while Koch would successfully substitute von Pettenkofer as the leading figure in the field of hygiene in Germany in the latter half of the 19th century (Evans, 1987:267).

In other words, more than the "absolute" value of any specific contribution in the fight against cholera, what defined its survival and success was the degree to which it fit in with its institutional context, and the degree to which the contribution became itself institutionalized (Mack, 1991:17). Given the direction in which Western societies were going during the 19th century, the final outcome of this heterogeneous and unsteady process was, whatever its temporary digressions may have been, the definite interpenetration of the state and the profession, and of their respective interests (Evans, 1993:145; Evans, 1987:505). In terms of practice, it meant constructing organizational solutions (Pelling, 1978:99).

Conclusion: The Intimation of Modern Organizations

Among the multitude of inventions through which people have learnt to order their interactions, organizations stand as relatively new, if not in their creation, certainly in their widespread use. Weber could write at the turn of the century about bureaucratic organizations as an important part of social life. However, just a hundred years before, the role of such complex social entities in society was relatively marginal beyond the Church and, perhaps, the army (Jacoby, 1973).

As a phenomenon of urbanized modernity cholera in Europe and North America was contemporary with the rise to preeminence of the "organizational solution." Such coincidence (which is itself evidence of the multifarious effects of modernity in society) offers us in cholera a powerful instrument through which we may gain a better understanding of the modern world of organizations in which we live. However, to make use of this opportunity, we must overcome the limitations of an approach that breaks down social analysis into a debate between big-picture and small-picture approaches to its subject. Rather, we must see modernity as a "whole-picture issue," in which cholera epidemics take place as part of a constellation of events. In doing this, we might lose analytical parsimony, but we more than make up for it in understanding.

On the basis of this assumption we may think of "organizational modernity" – that part of modernity that is increasingly articulated through organizations, and of which we are ourselves denizens, as consisting of two aspects. Although analytically distinct, in practice these two aspects flow into each other. In the first, organizations are experimented with as solutions to social issues. It is this phase that the present chapter discussed in detail – hence the notion of "exercises in modernity." The second phase concerns the full realization of organizations in society, their penetration into increasingly minute details of human life, and their adoption as the institutionalized, taken-for-granted framework of existence for a growing part of humanity (*Cf.* Perrow, 1991).

The second phase, our contemporary reality, the context of the present 7th cholera pandemic, cannot be fully understood without a grasp of the means through which it came to be. The six trends discussed in this chapter show us some of the main avenues through which the construction of the world we inhabit progressed. First, if we

can talk about a world system (Wallerstein, 1983) it is because practical articulations exist between increasingly powerful centers and sets of satellite localities, both within the immediate context of the nation-state and between states and multi-state regions (*Cf.* Quijano & Wallerstein, 1993). It is organizations in all fields of human endeavor, including those of health care, that sustain the sets of relations between centers and localities, in ways learnt during the 19th century.

Furthermore, a pervasive feature of modernity is social control, exercised in increasingly detailed ways (Giddens, 1990; Dandeker, 1990). The premodern massive and undifferentiated means of exercising power have given way to specific, "surgically" precise interventions upon individuals and groups of individuals on the basis of their distinguishing features. It was in the nineteenth century that medieval quarantines and *cordons sanitaires* – which made no distinction between the sick and the healthy, the rich and the poor – gave way to the isolation of foci of infection and to disease prevention through planned intervention. Again, it was organizations, not only as instruments of intervention, but as the frameworks that served to characterize individuals and groups, that offered the means for such minute control.

Correspondingly, it was in the 19th century that the bureaucratic organization arose as an instrument capable of handling the mass of information produced by surveillance, and needed for control. As a focus for attention in the 19th century experience of Europeans and North Americans, cholera showed these societies the benefits that derived from the powerful bureaucratic tool, and also the threats it posed. The history of the 20th century can be told as a universalization of experience with the organizational tool. This is evident, as much in the wonders of organization which allow the matching of organ donors and recipients across vast geographic spaces in a matter of hours, or in the rapid mobilization of resources from all over the world to face cholera in Latin America, as in the implacable efficacy of the large-scale mobilization required for modern war (*Cf.* Habermas, 1994), or in the profound penetration of the interests of the metropoles into the life of localities in a peripheral society such as Guatemala. Such experiences constitute the practical extension of both the organizational causes (e.g., industry, urbanization) and consequences (e.g., large-scale government, expanded mass communications) of the phenomena that constituted cholera's milieu in the 19th century.

Additionally, the debates over public services that became so acute in the 19th century, as I have shown in this chapter, also continue to shape the relation between government, business and civil society to this date. Once again, it is within the framework of organizations that the debate takes place, with the parties to the debate fundamentally vying for the control of these same organizations.

Finally, as Giddens points out, expert, science-based knowledge systems are pervasive, pivotal elements structuring modern life:

> *"...the systems in which the knowledge of experts is integrated influence many aspects of what we do in a continuous way. Simply by sitting in my house, I am involved in an expert system, or a series of such systems, in which I place my reliance. I have no particular fear in going upstairs in the dwelling, even though I know that in principle the structure might collapse. I know very little about the codes of knowledge used by the architect and the builder in the design and construction of the home, but I nonetheless have 'faith' in what they have done. (...) I have very little knowledge of how the car works and could only carry out minor repairs upon it myself should it go wrong. I have minimal knowledge about the technicalities of modes of road building, the maintaining of the road surfaces, or the computers which help control the movement of the traffic. When I park the car at the airport and board a plane, I enter other expert systems, of which my own technical knowledge is at best rudimentary." (Giddens, 1990: 27-28, author's emphasis).*

Once again, such taken-for granted complexes of action and knowledge, including those pertaining to health care, operate through organizations in the practice of professionals. Yet, they are phenomena that our great-grandparents only saw inchoate. The story of cholera sheds light on the construction of one such system along three fronts: First, it shows the development of the technical expertise of the medical profession. Second, it tells about the path of political ascent of the profession, which would serve to back that 'faith' in expert systems to which Giddens refers. Third, it is an account of the structuration of the specific organizations that would sustain both the expertise and the political power.

Finally, a fuller sense of the powerful implications of organizations in history can be had by considering that it took Europe the better part of the 19th century to overcome cholera (or rather, to realize how it had managed to overcome it), and another hundred years to find the biological agent of the disease. The contrast with the story of AIDS could not be more striking, where the pathogen, many major aspects of its epidemiology, and an incredible array of details about the disease were found in just a few years. Similarly, three years have sufficed to turn cholera into an undistinguished

disease in Latin America. In neither of these two cases am I considering the eradication of the disease. Rather, I am thinking about society coming to terms with the issue and placing it within a causal and interpretive framework. In contrast, the first challenge for people in the 19th century was to elaborate such a framework. Although, of course, addressing the issue proceeded simultaneously with the articulation of an interpretive framework, it was only once this framework was in place that societies could start to deal with cholera in a "modern" objectified manner. In contrast, for the children of high modernity (Giddens, 1990), such objectification proceeds almost unconsciously through the texture of organizations.

VIII.
Centers and Peripheries: How the Contexts are Linked to Each Other

Having shown in chapter VII how central governments and local organizations became increasingly linked around the issue of cholera through the repeated encounters with the disease, I will now explore further how the agents from the different contexts dealing with the cholera epidemic in Guatemala are linked to each other in contemporary practice. I will distinguish here between central and peripheral agents, and show how they are embedded in the "fabric" of modernity. In analyzing the data it becomes clear that there are important differences between the local, national and international organizations that express variations in the power of the agents to affect each other, and in the range of geographical and operational elements over which any given agent can act. These differences can be described according to a center-periphery dynamic. Central agents and contexts are those that tend to set conditions, strategies and explicit goals for themselves and for others with relative autonomy. Peripheral agents are those that tend to follow the conditions, strategies and goals set by others. According to this distinction it becomes evident that agents in the international context stand in a more central position than the national ones, and these in turn do so in relation to agents in the local context. In other words, unlike in conventional development theories, the notion of centrality is used here to denote *de facto* power, not to imply a normative model for copy or contrast (*Cf.* Escobar, 1995).

These distinctions and the relations they define are inscribed within the overall operation of capitalism as a world economy, which in its expansion either co-opts, destroys or marginalizes alternative existing systems (Hettne, 1990). This dynamic is a consequence of the imperatives of accumulation and economic growth that characterize the capitalist world system, and which can be observed throughout its history and in all geographical locations (Wallerstein, 1983).[1] In this general scheme

[1]Starting in Western Europe, as the economy became commodified, the economic and social survival of agents could only be guaranteed through the constant accumulation of capital. Such constant

Guatemala occupies a relatively peripheral position, with its peri-urban communities and the local organizations that serve them, such as the Health Center, being situated at the very margins of capitalist expansion. In chapter VII we saw one expression of this expansion in the tensions and struggles for control that developed between central governments and autonomous municipalities in the context of several European and North American countries in the 19th century. In this chapter I will discuss the same dynamic as it appears in the contemporary relations between organizations in the international and the national contexts, and between these and organization in the local context.

There are important differences between the two separate chronological contexts. In the early 19th century the relation between centers and peripheries was only just coming to maturity. Central governments in 19th-century Europe and North America experimented through cholera with ways to establish and institutionalize organizational patterns of centralization. In contrast, in the late 20th century the centralization of the nation-state is a fully institutionalized strategy for social organization, established precisely through 19th-century "exercises in modernity" – including those concerning cholera. The center-periphery system now not only articulates the state with its component communities, but also guides the relations between states.

Even recent efforts at decentralization may be understood as the fine-tuning of a system of co-optation, making the center-periphery articulation more efficient through a "division of labor" that pushes non-strategic functions to the periphery of the system. In this chapter we will see how agents from the national and international contexts attempt to contain the operational aspects of cholera control at the local context, at the same time as they reserve for themselves the functions of supervision and control, and the authority over the allocation of resources.

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accumulation required the ongoing rearticulation of the productive system around "new" technologies and products, and coupled to it, the expanded incorporation of cheap labor to offset diminishing returns. These processes have become imperatives to those who live within capitalism, and push the geographical limits of the world system in the search for new labor pools (and secondarily, new markets) (*Cf.* Wallerstein, 1983)

In talking about centers and peripheries I do not intend here to subscribe to a rudimentary model of dependency premised on international conspiracy theories in which external elites seek to subvert the state system in another context with the complicity of the local elite in order to further their private benefit (*Cf.* Ignatieff, 1983: 77), even when such conspiracies have played a significant role in realizing the center-periphery dynamic in more than a few cases even just within Central America (*Cf.* Dunkerley, 1988). At the same time, it is naïve simply to consider organizations such as the ones I am studying as functionally necessary economic phenomena. Rather, they are understood here as the political, cultural and administrative framework that both supports institutionally and evinces the actualization of the economic relations of modern capitalism.

In order to illustrate this process of support and actualization I will discuss three categories of strategies through which individual and organizational agents from the local, national and international contexts establish relations with each other and attempt to pursue the realization of their organizational agendas through these relationships. Specifically, I will consider strategies of surveillance, control and exercise of authority; strategies involving knowledge, information and rule making (as forms of "routinized information"); and strategies involving what we conventionally call organizational "structures" and "processes," that is, the design, inputs and products of organizations.

Surveillance, Control and Authority

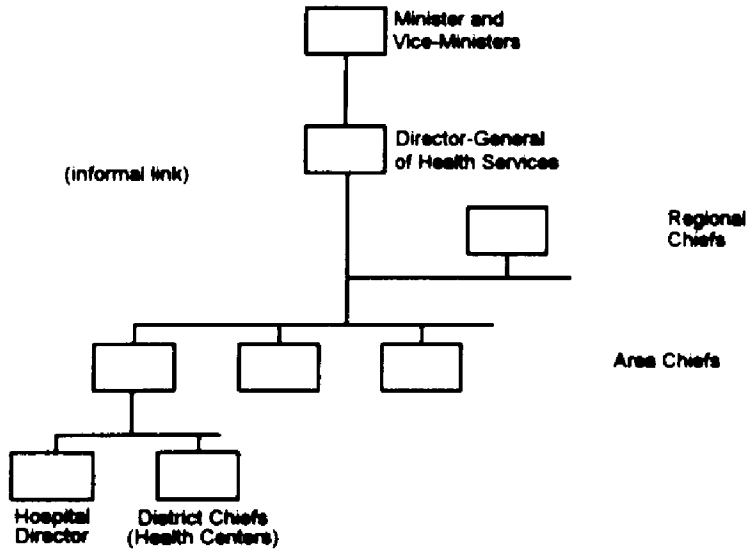
In this section I will discuss how the more centrally situated international organizations increasingly penetrate into the operations of the more peripheral ones in Guatemala. This is especially the case as the organizations of the national government, especially those of the Ministry of Health, appear to be losing power and resources. It is a phenomenon that develops through the twin processes of centralization of authority and control on the one hand, and decentralization of operational responsibility for cholera care on the other, each related to the other through enhanced mechanisms of surveillance.

I will introduce the section by presenting a story told by one of the subjects. On the surface it is a story of national, local and bureaucratic politics. But it is also a story about the many different implications of the relations between organizations in centers

and peripheries. Before presenting the story, however, I must digress for a moment and describe the organizational context of the Guatemalan Ministry of Health.

Guatemala, as a national political unit, is made up of 22 dependent politico-geographic divisions called Departments. Each of these is in turn divided into a varying number of autonomous Municipalities. As part of a global trend (or maybe more exactly a fad) toward the identification of "functional" divisions within the state, the Guatemalan Constitution of 1986 introduced a further figure, the Development Region, which groups a number of Departments for purposes of socio-economic development. There are at present eight Development Regions. However, their functionaries are neither placed within the chain of command nor given any real autonomy, and the identity of the Regions remains very much in question.

In the case of the Ministry of Health, there are eight Regional Chiefs, one for each region, and usually one Area Chief for each Department. Each Area Chief has authority over a varying number of Districts, which are usually directed from a Health Center such as the one I studied. Formally the hospitals of the national system are under the jurisdiction of the Area Chiefs. However, the hospitals absorb almost half the budget of the Ministry of Health. As a result, in practice hospital directors have immediate access to the highest political and bureaucratic echelons of the Ministry of Health, which places them, if not above the Areas in authority, at least in an equivalent position.



> Leonel has been telling me about the problems he has seen due to the different political allegiances of functionaries in the bureaucracy. Political patronage is still prevalent, executive positions frequently being awarded by officials elected in local and national politics as compensation to political supporters. The result is a patchwork of hierarchically related but politically antagonistic bureaucrats. Leonel talks about the

health sector's administration being "politicized." Complicating things, the story develops within a "finca," or plantation – frequently quasi-feudal productive entities within which the reach of the state is at best tenuous

"The epidemic in the Palo Gordo *plantation in '93 is well known. People got there rather late, when things were starting to get really bad, and so, trying to make sense of things I spoke with the director of the hospital in* Mazatenango, *(...) a hardworking, focused person. She was helping with a week-end vaccination campaign when she learned that they were sending several cholera patients in an ambulance to her hospital, so what she did was give the order that they have an IV drip started and return them to set up a UTC [Cholera Treatment Unit] in* Palo Gordo. *She arrived there that week-end, a Sunday I think it was, and organized services there. She took equipment and supplies to set things up, so they wouldn't contaminate the whole route from the plantation to the [hospital], as had happened before (...).*

"Anyway, it was also because it was not in her interest to open a space in her hospital which would mess up everything, the best thing is to do it where you have the problem. Next day it was the Central level that moved to Palo Gordo *(...), but it was the hospital that first organized the response in the plantation. So, the next day, the Central level was there at the plantation, with the Regional Chief – in those days it was still the* MAS[2] *that was in power –. After that, the Area Chief [– a Christian Democrat –] showed up. When he attempted to enter, the plantation administrator would not let him in, because the Area Chief did not get on with the private sector, and certainly not with the administrator. So they warned the Regional Chief that he should be ordered to leave, otherwise they would not let the Ministry do anything, if he went in. I was told this by several people, including the Regional Chief himself. (...) So he spoke with the Area Chief, seized the opportunity, because he also had problems with this guy, had a go at the Area Chief's reputation and sent him packing. That left only him and the Area epidemiologist to work with two other epidemiologists that had come from the Ministry, to see what was going on.*

"The Central level was supposedly going to organize a study, (...) and this created a problem within the Area itself, because (...) the Area Chief said that the epidemiologist had put himself on the Regional Chief's side and that he was not a loyal person, and so they started to push him aside. Anyway, some months later the epidemiologist went back to the Health Center he had been assigned to originally, and gave up his efforts at doing epidemiology in the Area. Well, a year later he returned to the Area, this time with a formal assignment, but now he'll know to look after himself [laughter]." (Leonel, Mission Physician).

The first and least obvious item I wish to draw attention to is the relation between organizations in the international context and agents in the national and local contexts. In this case it is Leonel, the interviewee himself, who personifies this linkage. He is a Guatemalan-born and -trained physician who works for the Guatemalan bureau of an International Organization. As such, he straddles the line between the

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[2]"Movimiento de Acción Solidaria," a political party

international and the national bureaucracies, in a way serving as the bridge for ideas, interpretations, norms and prescriptions that can turns these two bureaucracies into a single 'epistemic community' – a network *"...of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue area."* (Haas, 1992). More interesting however, is the fact that, as a national representative of an International Organization, he can gain access for that organization deep into the national bureaucracy. In this function of surveillance he gathers not only formal data, but also a host of impressions about the political dynamics of events at the very margins of capitalism, as exemplified here by the plantation system.

This penetration is not to be understood as a crude intrusion into the workings of the national state. Rather, it is a social order that is assembled in an ongoing fashion from the conjunction of national and international conditions. The first of these conditions is the increasing weakness of the national organizations within the health sector, a weakness that is clearly recognized by agents of the International Organizations:

> *Felix: "...you're telling me that everybody is trying to work at the local level. Doesn't that generate ill feelings at the central level? How are you dealing with that?"*
>
> *Deborah: "Well...I would say not yet. The central level in Guatemala, the Diarrheal Diseases Control Program, is within the Mother and Child Health Department, and [that] department has five people. It used to be about thirty, but now they have five, so they don't have the capacity to solve problems, they can't work, they are so few. There's one person assigned to everything concerning Diarrheal Diseases, Cholera, Oral Rehydration Salts, everything. Just one person!" (Deborah, Mission Sociologist)*

This weakness has important implications for the articulation between organizations in the international and the national contexts, which I will explore further on, but also between national and local organizations. Specifically, it is translated as a problem of legitimacy, both within the bureaucracy and between the bureaucracy and the community. Subjects in the local organization neither trust nor believe in the capacity of members in the central levels of the bureaucracy. Indeed, national agents are themselves obliged to admit their limitations.

I have asked Juan if in dealing with cholera the Health Center has been involved with central agencies from the Ministry of Health His response is immediate and he sounds affronted I have touched upon what is obviously a sensitive subject for him

"Look, let's forget about the Ministry [of Health]. These people really couldn't care less. 'You see what you can do,' and then suddenly, 'Look here you have everything you need,' then 'no, its the policy, so you don't go, [after all]' (...)" (Juan, Health Center Physician)

* * *

"And then, I must admit, the [lack of credibility] that the official institutions have, all of government and the Ministry as a part of it, due to decades of administrative, technical and financial problems, all this is leading to communities having different levels of participation." (Pedro, Government Physician)

As a result, there is a de-coupling of the elements of the health sector, with fiefdoms arising at local, and particularly at intermediate levels, as Leonel's story illustrated so well. Subjects trace problems in the Health Sector to this breakdown in the chain of command within the Ministry of Health.

Manuel has been telling me about problems in the quality of health services

Manuel: "...many District Chiefs have had a good leadership, but in the Ministry there is leadership varying from very good, to good and to very bad. As the papers said today, there is a protest in Chuarrancho *somewhere, they want to get the [District Physician] out, because he is a drunkard. I've found his sort by the dozen, so if the Cholera campaign depended on that guy, the only 'cólera'[3] he would get would be from being drunk."*

Felix: "Now, you're telling me about differences, (...) what are these differences due to?"

"I would say it's a bit complex, but what one can do is describe general patterns and I would say, first, that [the irregular quality of services is] a problem of technical, moral and political leadership among the highest authorities in the Ministry of Health, more specifically the Minister, Vice-Ministers, Directors General of Health Services. And [so] in the case of the Departments, [...] the Minister of Health for Quezaltenango *is the Area Chief of* Quezaltenango. *Here [in the capital] they just see it by remote control, he's not the Minister of Health in Quezaltenango, there it's the Area Chief [that's the boss]." (Manuel, Mission Journalist)*

For the context, Manuel's judgment of the performance of the upper-level executives of the Ministry of Health is harsh, especially considering that Manuel is an

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[3]Manuel is playing with words here In Spanish "el cólera" (masculine) refers to the disease, while "la cólera" means an intense, sudden anger

executive in an International Agency, which usually play down their opinions in the name of diplomacy. This does not mean that his perspective is necessarily biased or exaggerated. It does suggest, however, that the issue is worthy of further exploration. In this respect, we may note that the preoccupation with the "dysfunctional" breakdown in the chain of command is paradoxically accompanied by calls for greater decentralization:

> *"Something we try is that it not be the Central Level that analyzes the information, that the information not come here to me, that I do the analysis, and then send it back to them. What we managed was that they do their own analyses at the Health Area level, and now we are promoting that the analyses be done, not just in the Areas, but also in the Districts, and that they include not just Ministry personnel. It used to be that we, as health personnel, analyzed the situation (...). Now we are promoting the participation of community leaders, that the Mayor (...), the midwife, the commander of the military base, the chief of police all come, that other sectors take part in the analyses..." (Julio, Government Physician)*

Without wanting to appear cynical however, it is possible to find motives for this paradoxical trend that go beyond the promotion of a greater control of information by localities. Some intimation of this is offered by Julio himself, who goes on to say that

> *"...frequently, when they analyze their information they begin to discover the determining and conditioning factors of the disease, and so they say, 'Well, we at the Municipality can work on this, this, and this, so the community becomes committed, it's no longer just the personnel from the Ministry, the health sector that bears all the load, because we have to share the cholera problem. It is really not just a problem for the health personnel, it belongs to everybody."*

This same paradoxical interest in decentralization and control can be seen in the accounts of local agents in the Health Center, who in their efforts at community empowerment unwittingly perpetuate the top-down flow of information that sustains a health care system built around clinical-curative medical practice:

> *Beatriz: "...I think that in other places it would be good if people saw such participant work systems, where the community has a greater opportunity to say how they want things. Maybe that way we would get more done, (...) maybe that way people would change, because most things have been imposed. So that's another advantage, that back with us people have been taken into account."*
>
> *Felix: "So, how do you take people into account, how do you incorporate them?"*
>
> *Beatriz: "We ask them. At least this year we gave them the training, we gave them a course on tuberculosis and now they are managing patients themselves, they give them the drugs. We gave them a course on breast feeding, we trained them about vaccination when we did the vaccination [campaign], a whole lot of things have been*

> *given to them. The same things we are given [by the Ministry], we explain to them, and I think that's good, because people are interested in learning, they keep coming to see what else they can learn and put into practice. So if these people say they give injections and charge, we don't mind that, what we're interested in is that they work for their community, because there are people that work well and we can develop as positive community leaders,..." (Beatriz, Health Center Physician)*

What we see then is the establishment of a "division of labor" that seeks to segregate problems of care at the periphery, rather than compound them at the center with problems of policy and control. A similar process was reported above by Leonel in the *Palo Gordo* case when describing the behavior of the hospital director who did not want cholera to *"...mess up everything..."* in her service. A further aspect of this division of labor concerns the issue of control of information:

> *"...I was telling you that the information system is something that the Central level is very much interested in. At the Local level they are interested in [things other] than the information, because it is there that they deal with the [clinical] problems. They are maybe not as interested in the worries that the Central level has because of their lack of adequate information, and that the press learns about the outbreaks before they do." (Leonel, Mission Physician)*

In practical terms, this translates as an interest in consolidating the center's functions of surveillance and control:

> *"And we, as elite personnel in the Ministry of Health, with greater training, should be directing our actions at supervising, monitoring that these activities be implemented, first the collective ones, then the individual ones. That's where we should direct our activities, rather than just dealing with clinical service issues." (Pedro, Government Physician)*

Again, Leonel has given us a clear example of this process of decentralization with increased control in the case of *Palo Gordo*, when he tells us that the hospital director

> *"...arrived there that week-end, a Sunday I think it was, and organized services there. She took equipment and supplies to organize things, so they wouldn't contaminate the whole route from the plantation to the [hospital], as had happened before (...)."*

There is here a containment of the problem at the periphery, accompanied by increased control and organizational intervention. In this way, the center's liability for operative problems is limited without affecting its authority and final power of decision. The paradoxical juncture of fractures in the hierarchical relationship within the state's apparatus and the weakness of decentralizing initiatives has implications that go

beyond the limits of the state, however. The International Organizations equally prescribe and promote the "paradoxical" association between decentralization and control:

> *"So we need to have management control mechanisms in order to know that the services are responding, to be able to monitor their response. And so as soon as an Area, in spite of everything, does not respond, we can intervene from the Central level.. " (Héctor, Mission Physician)*

The lack of effective decentralization is problematic from the international agents' point of view, because it does not allow community and organizational agents to relate to them with the flexibility that the international agents would desire. In practice, the processes of decentralization, usually promoted as positive, may not necessarily imply more local control, as the waning national power is substituted by supra-national interests. In a way, this reflects upon a possible growing "irrelevance" of the nation-state (*Cf.* Reich, 1992), where the metropoles are much further away, and yet penetrate much more deeply into the fabric of peripheral societies than in times past. This penetration parallels the transnationalization of trade that has resulted in the entry of the products of industrial metropoles into an ever increasing number of localities. The agenda of at least some international agents appears as the corresponding penetration of the "government" side of the characteristically modern organizational and bureaucratic complex of business and government into these same remote localities:

> *"In January 1995 the Ministry is going to start, rather against its will, the decentralization process. This means that the [International] Agencies have been trying to work at the local level, but there are[n't yet] laws in Guatemala to decentralize the Ministry. So all the power is still in Guatemala [City], not in the Areas, they don't have the power to manage funds, and the [international] agencies are trying to install Improved Administration systems there,..." (Deborah, Mission Sociologist)*

I have presented in this section evidence about the ways in which central and peripheral organizational contexts become articulated in a web of surveillance and control. As weaknesses in the national government persist and grow, operational aspects of the cholera control effort are pushed to the periphery in an attempt to limit the national government's liability for these operational efforts while retaining its authority and its control over resources. Simultaneously, the international organizations enter into this picture as a new locus of control, seeking to empower localities in a trend

that serves their functional annexation to the international interests of distant metropoles by strengthening their autonomy vis-à-vis the national authority. In this process, the efforts of national technocrats seeking to separate local technical interests from national politics unwittingly further that large-scale agenda.

What emerges is a picture of a web in which control is being broken down according to its object, with technical, operational control moving "out" toward the local organization, and policy control moving "in" toward the centers represented by International Organizations.[4] In the process, new systems of articulation through surveillance are developed, both formally, through improved epidemiological and administrative mechanisms of data collection and analysis, and informally, as flows of more subtle and nuanced political information that move through channels such as the national representatives of International Agencies. Of course, this does not mean that the national organizations of government have become irrelevant. Rather, what we see here is a *trend* toward a diminishing importance of the nation-state as a focus of social organization. Further, the phenomena described can be thought of as a framework of relations specified by rules and actualized by flows of information and knowledge. In the following section I turn to the discussion of these issues.

Norms, Knowledge and Information

In this section I will explore the nature and role of norms in the experience of the subjects, and of the knowledge and information these norms condense. The agents in the international, national and local contexts all move within a framework of taken-for-granted rules and norms structuring their experience. However, these norms are also instruments of interorganizational power, giving an appearance of objectivity to the asymmetry between agents, and investing specific ways of doing things with a certain binding quality over these agents. Here I will show how conflicts arise between the norms derived from explicit policy intentions in the international and national contexts, and the norms embedded in the forms and practices of organizations. As a result, all

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[4]This representation does not mean that international bureaucracies, especially those of Multilateral Agencies, do not have a measure of political autonomy with respect to the core nations of the world system. However, in the long run these agencies do appear to serve as instruments of the powerful, central states that control the larger share of their asymmetric division of authority.

efforts at implementing norms suppose a degree of negotiation, in which the agents of local organizations such as the Health Center or even more peripheral community organizations exercise a measure of power through their capacity to ignore the will of more centrally situated entities.

I will also discuss knowledge and information as the substance crystallized in rules. Especially, I will focus on knowledge as a variable distinguishing central from peripheral agents. On the one hand, central agents evince a greater involvement with "knowledge work" than their peripheral, local counterparts. On the other, knowledge is claimed as a basis for authority. The technical expertise of International Agencies serves to justify their inherence in the affairs of the national and local organizations. A similar process justifies national control over local agencies. This process is expressed in the case of cholera in Guatemala as a debate over the justification for "political" versus "technical" approaches to cholera.

Norms in the experience of agents

In representing the relation between organizational contexts, agents refer to norms as self-evident parts of the system. More specifically, agents in the national context assume the prescription of rules or norms as an obvious part of their reality. Norms are what you are supposed to produce if you work in organizations in the national context:

> *"Before we finished the [epidemiology] course, in January [1991], we started to make the Cholera Contingency Plans, so they started to work, and it was in this way that the Epidemiological Surveillance Department took over the Contingency Plan, to be in charge of information management and situation analysis. We created the norms and procedures for the surveillance of cholera..." (Julio, Government Physician)*

* * *

> *"...first we thought it was necessary to establish some work directives for the local level, and for the different institutions that were at the time working very hard on the issue of cholera, first in prevention, because it was coming, then also very hard because it was present. So, we made some general work directives that appear in the Technical Committee norms, I don't know if you have them,..." (Irma, Government Journalist)*

Correspondingly, agents in the local context see centrally emitted norms as unquestioned components of their work environment:

Julia is telling me about the management of the first case of cholera in the Health Center

"... the man came out of it very well, he was given tetracycline, one tablet every twelve hours, just as we are told by the Ministry,..." (Julia, Health Center Nurse)

In similar vein, some problems related to norms illustrate as negative cases the taken-for-granted nature imputed to them by agents:

"Even now we find some operative personnel still have trouble in using oral rehydration salts, despite there being abundant literature, despite having been trained (...) so some people in institution[s], before giving them oral salts, still set up an IV drip, (...) but this implies a transgression of the norm,..." (Pedro, Government Physician)

We can see here that the norm is a measure of adequacy of behavior. When the norm is transgressed, it is the behavior that is questioned, not the norm specifying it. Yet, norms are not just technical inputs functionally defining the agents' experience. Rather, they are crystallizations of power that direct trends in relationships. The prescription and enforcement of norms do not only signify operational instructions for dependent agents. They also shape the options that these agents see as viable vis-à-vis the activities they are involved in. To a degree this makes the dependent organizations "march in step" with the hegemonic organizations. In the following case we can see how the International Organization to which César belonged modulated the activity of national laboratories in relation to cholera through the combination of norms and the use of key supplies as instruments of power.

"These were researchers studying the Vibrio family [before the epidemic]. This gave us a bit of a problem, because they wanted standard strains (...) with which to do the studies, and we resisted this, as it [would] introduce exotic agents into the environment. The researchers were not very happy with our resistance (...). [However, once the epidemic had started we had] quickly to turn to the university researchers, in order to orient them so they would work with techniques that were appropriate for the control of the epidemic. (...) So the tables were turned, because now they were anxious to do their studies and (...) [they had] the opportunity to do research, however we saw our role as directing the labs toward service, and so published clear norms about this, (...) to limit their work according to an epidemiological interpretation, and [we] used the supply of specialized culture mediums and antiserums as a brake..." (César, Agency Microbiologist)

At the same time, the rule-bound links between contexts are more than simple, unidirectional trains of causality. For one thing, organizations are set in a complex, multi-layered web of norms. For another, as discussed previously, each organization has a more-or-less defined agenda, so that agents must approach each other through

a process akin to negotiation. Thus, for example, local organizations are the expected "operationalizers" of the national norms, and in this sense the national organizations assume that the local will act in the direction of stated policy intentions such as "decentralization" or "participation."

> *"...[what] we do is give them a general norm, and every time we visit the Areas we repeat that it is they who must determine what indicators to use,..." (Julio, Government Physician)*

However, the local agencies also realize norms embedded in the organizational design and practice of the sector, such as the prescriptions that sustain clinically-based medicine as the fundamental strategy of health care. They cannot break loose from this framework, even when explicit policy may push them in the opposite direction. In other words, local agents are caught at the interface between two sets of norms: one embodying clinically-based medicine, and the other manifesting the preventive, participatory and decentralizing intent of public health. As a result,

> *"...in general they follow the norms given to them by the central technical-normative level, but when it comes (...) to adapting a norm to the local level, to that reality, they have problems in visualizing the problem of health as a responsibility that is not exclusively theirs, because the "clinical" perspective charges them with diagnosing, treating and curing the patient." (Pedro, Government Physician)*

Additionally, we see central organizations having to adjust to the peculiarities of the local contexts:

> *"...I can't make a norm telling each of them how to participate, because each one is different. (...) So when we meet we try not to clash, but rather to see how we can give a norm and then adjust it to the [community]. (...) instead, if I arrive from the Central level and tell them, 'you will work like this,' we will definitely clash, and we'll never work properly." (Julio, Government Physician)*

As a result, norms constitute a taken-for-granted framework for behavior, but it is a framework whose different elements hark back to a variety of spatial and temporal origins that do not necessarily fit together. Individuals in any given organization, such as the Health Center, may at the same time have to respond to norms derived from the history of their own organization and of the health sector, from national policy initiatives, and from international interests. Finally, agents in any of the contexts are not simply docile followers of the norms. Rather, they are active pursuers of their own localized

agenda, with which other organizations must negotiate in the enforcement or implementation of norms.

Knowledge and information: The substance of norms

Up to this point I have discussed rules or norms as principles that specify relations. Additionally, norms may be seen as "crystallized" knowledge, that is, institutionalized patterns of prescription that translate information and interpretations into routine behavior. In a way, we could say that norms are "conceptual machinery." In the same way that the parts of a machine translate concepts into routine and effective mechanical action, so norms translate concepts into routine and effective human action. However, knowledge doesn't only play a role in this *a priori* specification of behavior. It is also directly involved in the everyday actualization of relations and in understanding the articulation of the organizational contexts. It does this, not only as an analytical category for the researcher, but also as an empirical referent for the subjects themselves. Among the research subjects there is a common recognition that contextualized information, as a basis of knowledge, is the essence of relevant action across contexts:

> *"...I think community participation can be achieved. We just have to look for the strategy, and that strategy is better known by people at the local level than by ourselves. In the long term it is each person's responsibility to look for these strategies. And it has an advantage [for local personnel], that they know the medium, they live there, know the people, their beliefs, their attitudes, their practices and their preferences, they know how to address the problems; and if they don't, now is the moment to start looking for them together." (Pedro, Government Physician)*

Furthermore, as I have pointed out previously, knowledge constitutes not only a significant category in their interpretation of reality, but is also *per se* an important means and object of work for agents, particularly as we move toward the center of the system. Indeed, the first role of the international organizations concerning cholera in the national and local contexts, and of the national in the local context, is precisely as purveyors of knowledge and information, both documentary and through training:

> *"...we contributed with the documents and guides that had been made throughout the world even before the epidemic appeared in the Americas in 1991. Spanish versions were made, with some adjustments, and this document was distributed [everywhere]..." (Andrés, Mission Physician)*

* * *

"...one of the main things we do is reports like those ones I showed you, called field reports (....). And those are intended to be read mostly by Agency folk (...), and what we tried to do is come up with some useful information that could be more widely spread to the public and to Agencies implementing projects (...). And so we came up with what we call Fact Sheets, both in English and Spanish,..." (Rick, Agency Engineer)

• • •

"...many people took part, and we gave lots of advice concerning technical content, and we gave support to the areas. We produced a huge amount of material." (Irma, Government Journalist)

In the opposite direction, organizational agents also spend a considerable part of their efforts in collecting information and articulating and interpreting it as knowledge, either as part of a theoretical research effort or with more immediate managerial intent:

"...the point was (...) to help a health officer of an Agency Mission to look across a country situation, and see whether some (...) organization w[as] covering certain needs, or [if] a supply was adequate, was there a reasonable way of calculating need for ORS in relation to cholera, was there a distribution system that could be responsive, was there a feedback built into the system, (...). [The] same with management issues, with surveillance for cases and for case fatality rates, to identify areas where things weren't going well, (...) looking, not just [at] supplies, but really the whole process of management, (...) was there a coherent and effective program of information around cholera. So we constructed this analytical framework that was designed as a tool to help agency missions look for places where there were gaps, and then see whether those gaps could be filled through the kind of services that our projects could offer." (Walter, Mission Physician)

However, knowledge as the coin of the interorganizational realm has more than exchange value. It also forms a basis for claims to authority, that is, for the justification of asymmetry in the relations that are established. In this sense it is intertwined with notions of individual leadership and especially with the contrasting values of "the political" and "the technical." The prescription and practice of articulations between a variety of organizations is premised on agents' understandings about the importance of "technical" versus "political" knowledge. Additionally, these are not static interrelations, but rather the products of an ongoing political-technical debate, which evolves throughout the epidemic as part of the process of negotiation. On the one hand, you have positions suggesting the primacy of technical expertise:

"I think that in each place the boss should be the epidemiologist, if he has the leadership. In some areas they have marginalized them, but, at least in Suchi *they are letting him do epidemiology, and in* Quiché *the epidemiologist is the Area Chief, so he coordinates and directs things, and puts another to do the epidemiological fieldwork." (Leonel, Mission Physician)*

• • •

> *"More specifically, I think that cholera, beside everything else, has served everybody as a political tool, even the politicians themselves. I'm talking about the President of Congress, the Ministers and everybody else, they have seen it from the political perspective, frequently ignoring our opinions as technicians who know, as we are at the grass roots level and keep in touch with it all." (Alfonso, Government Physician)*

On the other hand, you have prescriptions that see technical expertise as subordinate to the political system and to the intent embedded in policy design:

> *"For example, materials distribution, logistics, legislation, many things that are required to stop the cholera problem cannot be done by one sector. A group of technicians can't do this, it has to be the country, it has to be a policy, no? So, you need to involve the lowest political levels, I'm thinking of local political levels, and there's not much of that (...) If we keep these political inter-sector commissions, then the [health] sector can deal technically with the problem. Then the agencies, these levels can get financial and even technical support. But then it becomes channeled through the elements that, for good or for evil are already there, you don't need to reinvent everything, so it becomes an administrative problem..." (Héctor, Mission Physician)*

Furthermore, as the last quote shows, the controversy is not simply about excluding one type of knowledge in favor of the other. Rather the debate is about *how* the different organizations that sustain technical and political knowledge should be articulated within networks or hierarchies. Implicit in this is a concession to expert knowledge of specific fields of autonomous and exclusive competence, so that the problem of relating these autonomous fields to each other around a complex issue such as the cholera epidemic becomes one of interfacing the wider and generic political system with the different expert systems in conditions that are acceptable to all. Again, it must be borne in mind that all of these autonomous fields – both the generic political one and the specific technical ones – are realized in organizations, so that the issue of relating fields to each other translates in practice into a matter of relating organizations to each other. On the political side we have, for example, executive-level government bureaus and political party machinery. On the other side are "expert" organizations, such as epidemiology units and clinical services, and professional organizations.

The implications of this interaction between expert technical systems and generic political systems become especially acute at the interface between organizations and the community:

> *"We need to find ways to associate ourselves to others in order to work locally in response to real needs of the community, and not to the technical criteria (...). We talk a lot about (...) community participation, and I always ask, 'What do you mean by that?' Because it's one thing to make people take part in what we want, but another to (...) let them participate and let them decide (...). 'Let's do this, let's participate,' but in the end it's the technician who decides. (...) the opportunity for the people to program, to decide and do, to evaluate, that turns out being minimal." (Irma, Government Journalist)*

What we see, then, is an ongoing discussion about "*who knows*," and as a corollary, "*who knows best*." In practice this is expressed by agents in the various contexts as a dissatisfaction about the degree to which information is decentralized and about the legitimacy of the existing providers of knowledge. At the same time, there is also an underlying sense among national and international agents that local organizations cannot be wholly trusted due to their relative technical incompetence. This refers us to the broader process whereby peripheries and centers become established and maintained, because in general the periphery does show a lower grade of technical training and expertise, which would justify that concern. However, the processes that lead to less prepared personnel being posted at the periphery are themselves centrally driven, through mechanisms such as the classification of posts and the centralization of personnel training. In ways like these the dynamics of the center-periphery system at the same time create the asymmetry in knowledge and authority and offer the justification for its reproduction.

As a result, we have seen in this section that the lower status that local organizations have in relation to the more central national and international organizations is sustained in part by knowledge and its normative formalizations. On the one side, the knowledge of more central agents is assumed to be of better quality, more expert, and hence more authoritative. This is so despite some efforts at decentralization. On the other side, the expert knowledge of international and national agents become codified in norms which objectify them and dissociate them from their origins. As a result, there is no longer an identifiable focus of power in the relations of asymmetry that characterize the center-periphery articulation of the health sector.

At the same time, agents in all contexts do maintain a degree of autonomy, even if only in their capacity for non-compliance with a rule. As a result, for example, local agents may ignore norms about cholera, and in this way oblige the more central

national and international agents to enter into subtle and protracted "negotiations" with them.

Organizational "Structure" and "Resources"

Through the previous sections I have shown how the center-periphery articulation of modernity finds a concrete condensation in the relations between international, national and local organizations around the issue of cholera. In this section I will discuss more directly this organizational aspect of the center-periphery relationship. I have previously discussed the socio-material nature of the social order, suggesting that the social reality that individuals construct in interaction depends in a non-trivial manner on materials. Thus, I will consider here the flows of resources, both material and technical, that realize the relations between organizations, showing how the control of resources serves the more central agents in modulating the behavior of agents in relatively peripheral organizations, in this way materializing the cholera-related agenda of dominant organizations across all contexts.

In addition to exploring the relations between organizations through resources, I will discuss organizations directly, showing that "cholera organizations," that is, organizations set up around the issue of the epidemic, typically express inter-sector and inter-contextual relations, require the presence of a previous "culture of organizational solutions" and have a limited life expectancy.

The tangible inputs and products of organizations, and their formal design (their "structure") are the means through which the relations between contexts are most immediately evident. In addition to rules and knowledge, which I discussed previously, much of the contact between agents is mediated specifically by material resources. It is often through these material resources that agents attempt to modulate each other's behavior:

> Alfonso is in charge of the logistics of cholera supplies for the cholera crisis. He is explaining to me how he got the multiple demand of a variety of agencies under control

"At a given moment there was a lot of disorder there, and I decided to give cholera supplies only to the 24 Area Chiefs, so the NGOs[5] were out. [If they wanted supplies] they had to go with their Area Chief, and set things up there,..." (Alfonso, Government Physician)

These resource-mediated relations have subtle effects, establishing and maintaining taken-for-granted dependencies. As discussed in the previous sections, decentralization is an end sought both by international and national initiatives, and by the expressed wishes of local agents to have a greater degree of autonomy. However, in the following quote, despite the increasingly critical scarcity of supplies for local services, Julia apparently does not consider the possibility of searching for other sources of supplies, and accepts unquestioningly that the limits of the Health Center's resource base are defined by what the national executives of the Ministry of Health see as appropriate.

Felix: "[Are there] any other entities [with which you relate]?"

Julia: "With the Directorate General, they provide us with Oral Salts, when we have none, so we just go and pick up what they give us." (Julia, Health Center Nurse)

At the same time, the importance of resource-mediation makes materials an obvious focus of dissatisfaction and friction between organizations. In a way, they materialize the conflicting agendas of the organizations as these relate to each other.

"...sometimes the Minister comes [on TV] and says, 'The services are well supplied for,' and it's a lie, because you're trying to figure out how to get things (...) and if people come and ask, sometimes they get [mad], you tell them, 'You have to buy tetracycline, because we don't have any in the service,' (...) so they say, 'But you said on TV that the services were well supplied for!' " (Julia, Health Center Nurse)

Similarly, the dynamics of resources serve agents to characterize the diverse organizational contexts. Just as resources focus the *interaction* between organizations, they also evince the *nature* of organizations. In the following example, the way organizations in the local and the national contexts deal with resources serves Héctor as an index by which to characterize and differentiate these two contexts:

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[5]Non-Government Organizations

Héctor: "Something else that might be failing in management is supplies, no? We're working on this, but we're still not in a position to..., it's easy for us to work with the Areas, very complicated at the Central level (...)."

Felix: "Why is it more complicated at the central level than at the local?"

Héctor: Because, if we want to make a depot for salts or for materials, antibiotics, cholera, it turns out there are five different places, they're in Child and Maternal Health, they're in Disasters, the Cholera Commission has its own thing, the Region has another, and each one feels like the owner of these things. So its difficult." (Héctor, Mission Physician)

However, it is not only the inputs and outputs of organizations that show us where interaction occurs. A further consequence of interaction is the constitution of organizations themselves as means to address cholera. Indeed, "cholera organizations" have an eminently inter-sector and inter-organizational nature.

"Even before the cholera came there was a very strong, very large committee, coordinated by the Director General, including many institutions." (Irma, Government Journalist)

• • •

"An important point here is that we didn't do it alone, rather it was a combination with the Ministry of Health and other institutions that established an ad-hoc work team,..." (Manuel, Mission Journalist)

An immediate example is the National Cholera Commission, its own membership deriving from a variety of pre-existing organizations. This same model was used in local contexts, where Cholera Commissions were set up with varying ranges of geographic and functional responsibility. As pointed out in chapter V, the "popularization" of a specific organizational form was in good measure due to interests arising within the international context, anticipating, rather than responding to, needs identified in the local or national contexts.

"...in this work what the Agency did was stimulate, first at the national level, the formation of a group with representation from the different sectors (...) with sufficient power to initiate activities of prevention and control; but also at the Department level, at the District level, at the Municipal level. We promoted groups that worked on cholera prevention activities,..." (Andrés, Mission Physician)

However, the variable impact of these entities points to the fact that, although they may be externally induced, they are also constructed on a pre-existing understanding and acceptance of organizations as social solutions, what we could term

an organizational *weltanschauung*. For organizational solutions to take root in specific social contexts it was necessary that such solutions not appear "out of the blue," but rather form part of an institutionalized way of doing things in a given social environment:

> Pedro is telling me about a town that was notoriously successful at controlling cholera after a first catastrophic outbreak.
>
> *"[In that town] they have organized ex-choleric clubs, with people who have been sick and speak about their experience to the community, their family, their friends, their neighbors and their enemies. They have organized work in the institutions in such a way that from the janitor all the way to the physician know how to deal with cholera, and they talk about it with great familiarity. They have organized the school children. They take teachers and students to visit the Cholera Treatment Unit when they have cholera patients, when they are vomiting, when they have diarrhea, and they talk with them and explain it to them. So, it's no miracle intervention that they pulled out of their sleeve the day they were up to their necks in water, and succeeded as if by magic. There's a lot more behind this,..." (Pedro, Government Physician)*

As pointed out before, the International Agencies acted as the motor of many of these organizational solutions. In their organizing intent, more than simply "setting up" organizations, the International Agencies framed the situation in such a way that they induced interpretations and mediated organizational networks that coalesced around these "cholera organizations." Furthermore, we find the international agents inducing solutions, not only by acting *between* nation-states in the international arena (Finnemore, 1993), but also by actively mediating a large variety of processes *within* the nation-state:

> *"Ever since cholera appeared here we have given support to communications and education. We made various kinds of educational materials with the government, (...) we gave support to the National Plan in an activity we called 'consistency,' that is, inter-sector coordination, we helped with meetings at the local level, that is in the municipalities, and we provided supplies, such as oral rehydration salts. In addition, we provided human resources support." (Tito, Mission Physician)*

I will end this discussion about the organizational inter-linking of centers and peripheries by noting that these "cholera organizations" are characterized, either by design or by chance, by their limited life expectancy:

> *Felix: "... you told me that the Cholera Coordinating Committees had been abandoned. What happened there?"*
>
> *Pedro: "Let's say that the abandonment has been in two directions. The community has its beliefs, and either accepts or rejects us, or accepts partially (...) the*

measures. And from the point of view of the services, the infrastructure, the scarcity of personnel, [and] the problems of cultural, geographic and economic access to and from the communities, [all] imply that our services have concentrated their activities upon providing care. But issues of community organization, issues of prevention, have been addressed very disproportionately in relation to the care-giving activities. So this has let the committees die, they have died for a lack of follow-up." (Pedro, Government Physician)

* * *

We are talking with Manuel about a committee that was set up between an International Agency and several government organizations

Felix: "...did this go on working, or did it finish there?"

Manuel: "It lasted seven months, which was the beginning, especially in the month of July, once cholera appeared we were all set, (...) and it was a good job, we were really alert. The problem was, after that the authorities said, 'We sure are good, what happened to Perú didn't happen to us, in spite of us being poorer,' and so they were careless about something we had told them very clearly, when we said that this thing would end, that it was a closed chapter. Partly because we didn't have any more money, partly because that was our commitment, we had shown them it could be done, but it must go on."

Felix: "So that ending was (...) programmed?"

Manuel: " It was set for October, 'Chronicle of an advertised disappearance', you could call it. (...) And not just to blame another, we could say that the agency also was shortsighted about new outbreaks of cholera, in not considering that when governments are weak on the technical side of work, it is easy for us to say what we said, 'We'll let you see what you can do about it now,' but really you could anticipate that it wouldn't [work], and in a way, honestly, there were problems because we were passing the buck..." (Manuel, Mission Journalist)

There is a pervasive sense that the activities relating to cholera are transitory, which is reflected in the normalization discussed already in chapter V. Cholera organizations are no exception to this trend, and thinking about them as "ephemeral" or "discardable" organizations helps us to understand how the effects of the cholera crisis are buffered with increasing success within the long-term processes of the development of modernity and its internal articulations. They also shows us how the contemporary Latin American experience with an epidemic disease differs from the 19th-century European and North American encounters with cholera. While a century ago the epidemic challenged the way disease had been traditionally articulated within society, the present epidemic, even in as poor and marginal a society as Guatemala

was relatively quickly normalized through organizational solutions that are part of a pre-existing repertoire, rather than invented as direct responses to the disease.

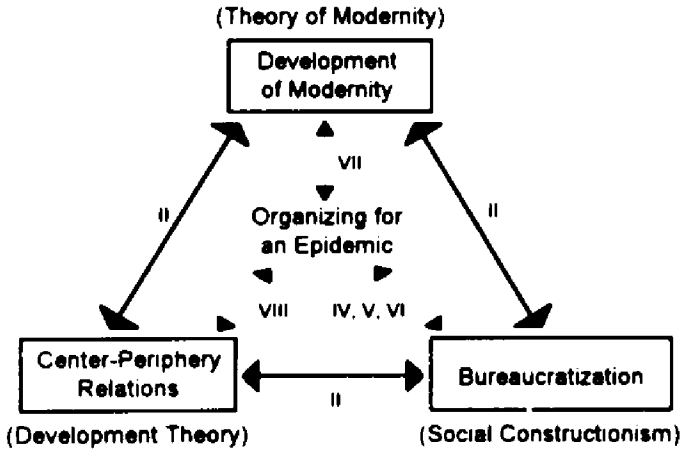
Such a pre-existing repertoire is built upon what I have dealt with in this chapter as the center-periphery relation between the international, national and local contexts and the organizations within them. We have seen that such a system of linkages is built upon paradoxical processes of centralization of authority and decentralization of operational responsibility that accompany what appears as a diminishing practical relevance of the nation-state. It is a system in which the metropoles, acting through the agendas of the International Agencies, penetrate ever more deeply into the operations of the nation-state. At the same time, the articulation of center and periphery is sustained by changing mechanisms of surveillance and claims to authority that depend on the de-legitimation of local knowledge, and by the authority of expert knowledge that becomes objectified as norms that agents in all organizational contexts must then follow as self-evident.

The results are organizations, and flows of resources between these, that materialize the center-periphery dynamic through increasingly smooth systems for dealing with the epidemic. Yet at the same time, the "smoothness" of this contemporary organizational solution is evidence of a certain "organizational expertise" that suggests more than a casual relation between the two chronologically disconnected events of 19th-century and late 20th-century cholera. Specifically, it harks to the existence of an underlying ordering of modernity, and more importantly, to *trends* in that ordering. In the concluding chapter of this work I will draw out the significance of this comparison and weave it together with the elements of social construction that I have presented previously as the localized, organizational realization of the modern condition in a Third-World context.

IX.
Conclusions

In the Literature Review I presented three bodies of theory that are relevant to the interpretation of the cholera epidemic in Guatemala as an organizational phenomenon. The first concerned the development of modernity as the socio-historical context for the rise and entrenchment of the organizational solution that characterizes both 19th-century and contemporary cholera experiences. The second body explored, through the lens of development theories, the relation between central and peripheral social entities as mutually dependent expressions of modernity that condition the nature of organizational interpretations of cholera. Finally, I called forth notions of social constructionism, and more specifically of enactment theory, as instruments for understanding the behavior of individuals as actual constructors of the bureaucratic organizations addressing cholera, and as integrators of contextual elements in that construction.

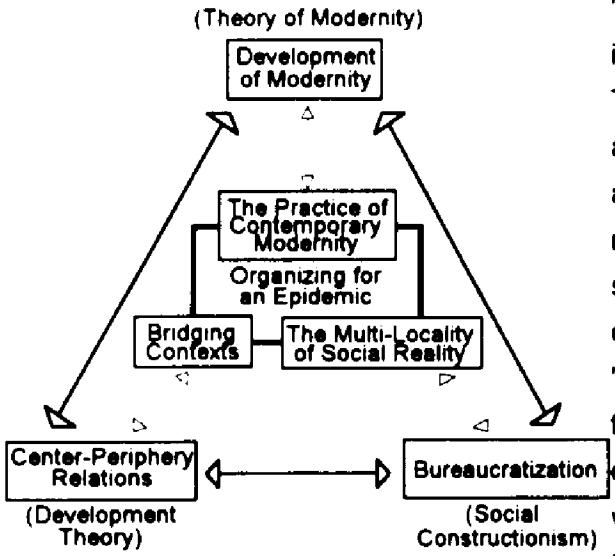
Following this, I presented and discussed in chapters IV to VIII data about the cholera epidemics in contemporary Guatemala and in 19th-century Europe, Canada and the United States. With the aid of insights derived from these discussions I began to construct theoretical accounts grounded on the actual cholera experience of the main agents in the local, national and international settings, at the same time bringing together the different explanatory strands into an interpretation of the organizational implications of cholera as a unified event. I present here the figure from the beginning of Chapter II to show



Note. Roman numerals refer to chapters

how I have now completed the circuit around the three main categories of phenomena and their relevant bodies of theory, and established some of the empirical relations between that theory and the organization of the epidemic as a formal object of research. In other words, I have addressed the items in the boxes at the three vertices of the triangle, and discussed the relations between them represented in the figure as solid arrows. Additionally, I have traced the relations represented by the dotted arrows between the theories and the central object of the research.

In this chapter I will conclude the articulation of findings and theory. I will focus on three inter-dependent aspects of the organization for cholera which most clearly link it to the three strands of the discussion. The first concerns the multi-local nature of the social contexts and of the "organizational solutions" they implement in dealing with the epidemic. The second aspect deals with the actual practice of agents facing cholera as an example of the contemporary realization of modernity. More specifically, it contrasts the experimental nature of the 19th-century "exercises in modernity" with the taken-for-granted manner in which contemporary agents implement a variety of organizational strategies in facing the challenge of the epidemic. The third aspect focuses on the implications of the findings of this research for our understanding of processes spanning multiple social contexts, and for our methods in researching them. I will also discuss some of the limitations of the research and their implications for further research efforts.



The Multi-local Nature of Society

Nobody lives in general. We are all situated individuals living in the immediacy of our personal experience. Furthermore, it is individuals that get sick and die. Yet it is also undeniable that the cholera epidemic belongs to a class of massive phenomena that operate in the realm of "the social." Indeed, we perceive epidemic cholera as an event that justly belongs to the category of the "macro-social." What this research has done is to re-emphasize the easily overlooked fact that these large-scale processes are intimately related to the micro-world of small-scale interactions. Thus, understanding multi-locality implies, on the one hand, explaining the nature of the reality of the "macro-social" and of its effect upon individuals and groups, and on the other its realization in the immediacy of personal experience.

For clarity's sake I will explore first the implications of the micro-social and then go on to the discussion of the macro-social. However, I must also begin by asserting that the macro/micro distinction, if taken at face value, is in itself a dichotomy that tends to obscure the integral and ongoing nature of social reality. To a good degree it is a dichotomy that only became relevant as modern Western societies developed and reified the large-scale constructs of the nation state and the state system, and distinguished the public from the private sphere (Habermas, 1989). Before this, the "individual" and the "social" were certainly present, but they occupied a single, undifferentiated category. An ancient example is provided by the worldview of the Old Testament writers, who tell us how God would punish or pardon a whole nation for the actions of single individuals. The practice of blanket quarantines and the institution of *cordons sanitaires* in the presence of individual cases of disease constitute a more recent and directly relevant example of the un-differentiation of the macro-social and the micro-social in the pre-modern world. Therefore, we must be willing to suspend our belief in the fundamental nature of the macro/micro divide, in the understanding that this useful analytical distinction at the same time obscures the unity of social reality.

Immediate experience as the locus where the social is realized

Concerning the micro-social, social constructionism recovered the "social fact" from the de-contextualizing influence of the object-subject distinction, and re-embedded it in the sphere of the intersubjective, emphasizing "*...the objective reality of social facts*

as an ongoing accomplishment of the concerted activities of daily life..." (Garfinkel, 1967:vii). At the same time that this recognizes the fundamentally interactive character of social facts, it also implies their localized nature: people's "activities of daily life" happen in their personal, immediate experience. When my research subjects discuss the cholera epidemic they are talking fundamentally about their personal experiences Even the formalized medical models subjects sometimes resort to, which tend to reify their object, are presented through the experience of these same subjects, and are used to mold that experience, rather than as abstract "textbook" explications.

Similarly, organizations and their interactions are also built upon the immediacy of experience. Even though agents in the context of modern societies can increasingly interact across discontinuities in time and space through the "disembedding mechanisms" to which Giddens alludes (1990), their understanding of this interaction is always that of its implications for the agents' immediate experience. In the life of the agents, the larger context relates to that immediate experience as an illustration, a cause for, or a consequence of the experience itself. This is most evident in the case of the subjects interviewed in the Health Center, whose discourse is least shaped by forms of work and modes of interpretation that impose a high degree of discursive structure. The language that shapes both their interpretations and their accounts of these interpretations is closest to ordinary language and to the ordinary experience that sustains it. In contrast, for those subjects whose activity is mainly "talk work" and who see the "macro-social" – whatever this may mean for them – as a distinct category and an object of work, the immediacy of experience becomes hidden behind a veneer of attributed structure in interpretation and account. However, even such structural accounts are shaped by their immediate experience and interactions. For example, a subject holding a Ph.D. in Public Health and working in a Washington bureau might explain reality by resorting to a variety of social scientific concepts that formalize that social reality. However, even those concepts are used only after having been included in the subjects' world through the very personal experiences of training or previous work, not as absolute abstractions.

In other words, in their conversations subjects tell me about the fragments of a broader world of phenomena that impinge upon, and become incorporated into, their more immediate organizational and personal worlds. From here they then go on to

reconstruct the wider world as they think it is, as they represent it to themselves, on the basis of the tools of interpretation that they have articulated in their small-scale world of direct experience.

This same process happens in the Health Center as it does in the national context or in the Washington bureaus studied. The difference between the contexts derives from the fact that the "fragments of the world of phenomena" that people get in each context are different, not only in their actual features, but in their scope. People in the International Agencies construct their social reality from fragments originating in a vast geographical area, and assemble them through the use of symbolic systems that include the relatively formalized and explicit interpretive tools of science and bureaucracy as well as the more informal elements of everyday cultural manipulation. In contrast, subjects in the Health Center effect the same process, but build it upon fragments of a smaller, perhaps more immediately accessible empirical context, and do so by applying less formalized interpretive means. In this picture, subjects from the national context are placed somewhere between the local and the national contexts, in terms of the scope of their "raw materials" for experience and of the level of formalization of their interpretive tools. Additionally, the phenomena and systems of interpretation on which subjects draw vary also according to factors other than organizational context, such as training or professional and ethnic ascription.

As a result of these differences, the Health Center gives an impression of "locality" while the national agencies and the Washington bureaus appears to the subjects and to the researcher as more "global" – so much so that the notions of "local," "national" and "international" have been incorporated into the vocabulary of the research as self-evident. However, in terms of the actual processes through which subjects relate to their knowledge and to their "environment," all three of these contexts are strictly local. What people are doing in realizing their social existence is fundamentally engaging their local experience. It must be noted that what is being questioned here is not the reality of the macro-social *per se*, but rather the assumption that some agents, namely those in "higher levels," somehow operate directly upon that macro-social realm, without the mediation of their own immediate experience.

This is evident in the use people make of cholera as an opportunity to make sense of reality and express their intent (for example, re-asserting their organizational

agendas), indistinctly from the context they are placed in. It is not that they set out willfully to mislead those they interact with by instrumentalizing cholera. Rather, the actual experience of cholera is all they have to go by in making sense of the world. Subjects use the matter of their actual lives at hand to recreate themselves, their activity, their objects, their sense and their purpose. It is not that people necessarily "use" cholera consciously, rather it is that this is the way sense is made, buy using whatever you have at hand. So for example, workers in the Health Center make sense of being a "Health Center person" by incorporating cholera into their picture of clinical and outreach practice. Similarly, national bureaucrats make sense by incorporating cholera into their context of action and thought in policy making and implementation. Garfinkel puts it in an awkward but precise way: "*whatever* is there is good enough in the sense that *whatever* is there not only *will* do, but *does*" (1967:18, author's emphases).

The macro-social: an effective reality

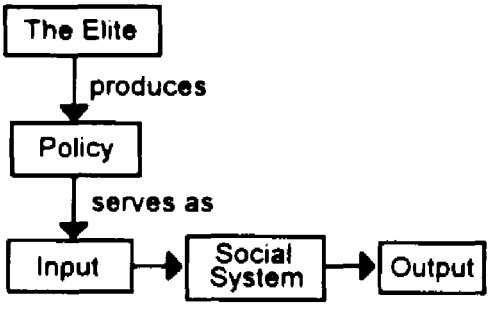
Having emphasized the significance of immediate, micro-scale experience and interaction in the articulation of the social, I must argue once again that the macro-social is no simple figment of individual agent's imaginations. Rather, it is an effective and powerful factor shaping their existence. How does this come about? We may think about the macro-social along several parallel and intertwined lines. First, the macro-social is a simple aggregate of actions and reactions that relate to material events. For example, to a degree the macro-social of cholera is constituted by the simple accumulation of behaviors surrounding sick individuals. Second, the macro-social is constituted by institutions. It is, so to say, the "software" of interpretations, rules and patterns for behavior that inform our individual conduct and which we take for granted. Such institutionality has a basis in previous individual action, but more than a simple aggregate of that action, it is a synthesis of behavior and interpretation, both past and present. Finally, the macro-social is language, it is the textual articulation that agents make in representing to themselves and to others those segments of experience that they perceive as more or less coherent wholes.

Putting it together: overcoming the macro/micro divide

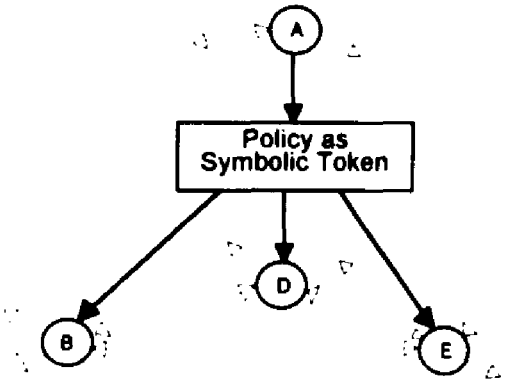
What implications does this approach have for our understanding of the organizational phenomena made evident in the cholera experience? First, there is no simple causal relation, either of precedence or of consequence, to be established between the macro-social categories (such as history, development, the nation state, the epidemic) and the micro-social categories concerning personal interactions. Second, the macro-social is still realized in multiple localities, whatever attributions of "emergence" we may make in experiencing or analyzing it as a supra-system (*Cf.* Bertalanffy, 1971). However, such attributions are in no way trivial. Indeed, as a social construct the macro-social phenomenon of epidemic cholera is very real, and through its organizing effect shapes practical action in definite, tangible and directed ways. However, its reality lies not in a general, reified "environmental" effect, as if it acted from outside upon people as members of an undifferentiated mass. Rather, the macro-social meaning of cholera colonizes behavior in the micro-interactions of subjects' everyday life. The occupation of the territory of practical action by social trends – of which the interpretation and re-interpretation of cholera is one example – is played out, not in atom bomb fashion, but rather in the trenches and in the "hand-to-hand combat" of individual experiences.

More specifically, in the case of cholera in Guatemala we see changes in the interpretation of cholera occurring as large-scale processes across vast contexts, but it is through skillful manipulations of the personal milieu that this becomes reality: bureaucrats twist each other's arms on the basis of resource dependencies that may affect "face" or job security, individual health care professionals are socialized into new models through training, outreach workers discuss diagnostic and therapeutic measures with members of the community in their homes. However, like infantry following a strategy, many of these micro-interaction are also patterned and mediated through the "symbolic tokens" (Giddens 1990) that sustain and transmit information across space and time in modern society. National health policy and expert training programs are examples of these tools that serve to disengage personal interaction from the constraints of time and space. Yet, their production and consumption are still realized in personal experience at both ends. The contrast between this and more conventional interpretations may be shown graphically. Whereas conventional thought

A Conventional Model:
The social System as an
Undifferentiated Object of Policy



An Alternative Model:
Symbolic Tokens Mediate
Worlds of Immediate Micro-Interaction

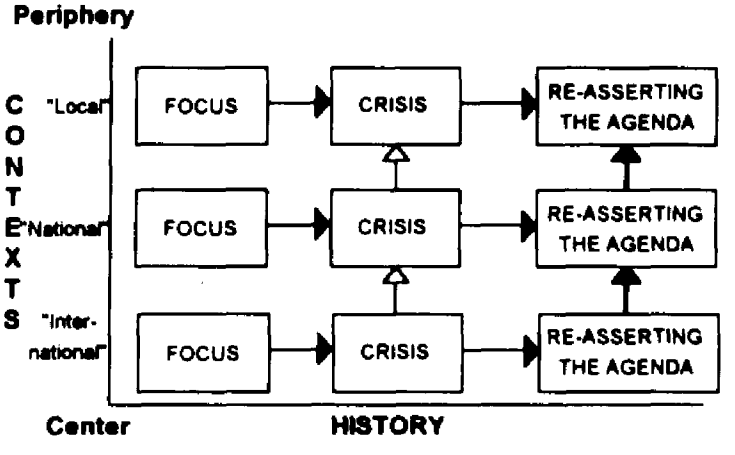


sees policy as an input for an undifferentiated social system, the approach advocated here suggests that symbolic tokens such as policy should be considered as specific mediators that impinge, among other interactive relations (either direct or mediated), upon the world of personal experience of agents, represented in the second figure as circles. The "system," as far as a specific policy initiative is concerned, emerges from the multiple personal experiences that are more-or-less simultaneously affected by a common symbolic token, and from the consequent interactions.

Furthermore, we tend to impose an overall logic upon the more-or-less arbitrary results of multiple interactions, but in fact *"[t]he logic does not reside in the institutions and their external functionalities, but in the way these are treated in reflection about them. (...) Language provides the fundamental superimposition of logic on the objectivated social world. The edifice of legitimations is built upon language and uses language as its principal instrumentality."* (Berger & Luckmann 1966:60-61) This again emphasizes the fact that linguistically articulated explanations of the world (the textual aspect of the macro-social) colonize that same world, even beyond the actual interactions that originally sustained them. Due to this, "local" interpretations of cholera generated by subjects in any of the contexts may eventually become parts of a larger account of the world. But this happens, not as an incorporation in which the "big picture" absorbs the small one, but rather as a colonization, in which the "growing story" permeates other accounts of cholera with its own meanings.

In this way it becomes apparent that the dynamics of modernity in which cholera occurs cannot be understood by asking only "macro" questions. Rather, if the world is multi-local, it is through enactment processes that such multi-locality is realized. At the same time, however, looking simply at the phenomenon of enactment might tell us about the "how" of events, but gives no explanation of why these events follow any specific route among the numerous possible paths implied by multi-locality. Additionally, this view of the articulation of the macro-social and the micro-social suggests that the links between the formal local, national and international "contexts" are sets of overlapping localities, flowing almost imperceptibly into each other through boundary-spanning agents (*Cf.* Jönsson, 1986), each subject acting in at least two such localities This offers some insight into the workings of one aspect of the contemporary practice of modernity that shapes the direction of the organization of cholera, namely, the relation between organizations in the center and in the periphery of modernity.

The significance of this overlapping multi-locality lies in the relation we may now establish between the dynamic of the articulation of cholera to specific organizational agendas (discussed in chapter V as a three-stage process of focusing on the issue, defining it as a crisis, and finally reasserting the pre-existing agenda) and the actual local, national and international contexts. This relation may be best thought of as a process occurring along two axes. One axis represents time, along which the articulation of cholera proceeds from focus, through crisis, and to re-assertion of the agenda. The other axis represents organizational contexts, which are roughly coextensive with geography, along which the increasingly dominant definitions of the centers are spread. As the agenda is re-asserted, and cholera re-interpreted in relation to it, the epidemic increasingly becomes a part of the everyday of the agents; in other words, cholera is *normalized*. In this process, the central agents become increasingly important in the specification of the terms in which



cholera is interpreted, both as an issue and as a behavior. This is represented in the figure by the increasing thickness of the vertical arrows that connect the contexts. As the normalization of cholera proceeds, we see an increasing spread of central definitions throughout the system studied, at the expense of the initial local interpretations of cholera: Indeed, the language of normalization is the language of the centers. However, at the same time, the issue becomes less relevant with time, and so localities attempt to get back to their usual, although reconstituted, everyday life. This is why in the figure we continue to have separate chains of development in each context, representing the relatively autonomous existence of each of the contexts. The features of this articulation between the dynamic of articulation of cholera to the agenda and the relations between contexts offer an important space for further analysis. More specifically, future research must explore how local agents manage to incorporate central prescriptions that are external to them into their practice, at the same time as they continue attempting to realize their own localized interests.

The Practice of Modernity

In chapters VII and VIII I made the point that contemporary organizational experiences with cholera hark back to, and stand in contrasts with, cholera experiences in times past. More specifically, in chapter VII I identified several trends that appeared as "exercises in modernity" in the 19th-century European and North American cholera experience. The importance of these findings rests on their implications for contemporary practice in terms of institutionalization. What in the 19th century were "exercises," constitute today emphatic prescriptions for practice. What were then tentative experiments in the articulation of the organizational solution in the face of cholera, are today a taken-for-granted framework for action, even in relatively peripheral contexts such as Guatemala. There are two implications of this process that I will explore here. The first concerns the articulation of central and peripheral organizations as realizations of power through the overlaps discussed above. The second is a tentative explanation of the transient nature of cholera organizations described in chapter VIII.

Power and localities

The use of a model premised on interconnected localities helps to understand both the variation that I have found between contexts and their commonalty. In the previous section I have treated the "locality" of agents' experience as a source of idiosyncrasy for organizations in the local, national and international contexts. In this section I will explore the issue of overlapping localities as a source of connectedness and commonalty between the contexts. How does the impression of hierarchy and organization between the contexts that leads us to treat them as "levels" in everyday speech develop, and how is it sustained?

If the relations between the contexts are built upon micro-interactions, then the asymmetry between contexts implicit in a hierarchy must also be based upon asymmetries in micro-interactions. Thus, the differences between local, national and international contexts depend upon instruments of power that are not abstract phenomena existing with independence from social interaction, but rather micro-interventions and exercises in micro-control over the implementation of the tools of conceptual manipulation (education, information, opportunities of practice), and over the information they provide. The data support such an account, for we see agents everywhere manipulating, but also resisting, each other on the smallest scale of their everyday dealings with the epidemic.

The greater or lesser success of some agents in perpetuating their interpretations within the overall system of articulations depends then, not so much on any inherent virtue of that interpretation, but rather on the resources that these agents can call upon to realize their will. For example, I have shown that agents in more "central" positions within the system (such as the international in relation to the national and the local, and the national in relation to the local) are more successful in implementing their will than their peripheral counterparts. However, as we have seen throughout the data, this is not due to any inherent quality in their solutions – a fact recognized by the central agents themselves –, nor to any "necessary" or functional set of articulations between the contexts. Rather, if some ideas have become dominant it is because of the institutional and material infrastructure with which they resonate. This brings us back to the importance of considering the social order, and more specifically organizations, as socio-material processes in which form and content, matter and

meaning, are ineluctably conjoined. In the case of cholera in Guatemala I have shown people putting together, not just ideas, but also the social and material infrastructure that will sustain these ideas. A specific instance of this social and material infrastructure is offered by the processes of personnel training, community education and outreach described in the data, all of these institutions that simultaneously sustain and are justified by ("resonate with") centrifugal flows of prescription. The evidence on negotiation reveals a further aspect of this: organizations and their agendas shape, not only the task of facing cholera, but also the way in which it will be done, its agents, its purpose and its instruments. As a result, the centers are relatively powerful because their ideas circulate further within the system than their peripheral counterparts, which face the one-way-valve action of middle levels discussed in chapter VIII. In sum, the centers' ideas can circulate because there exist institutionalized channels through which these ideas may flow, and processes that favor the dissemination and the acceptance of these same ideas.

For example, the success or failure of prescriptions for the decentralization of cholera control activities depends on the previous spread of a model of care within which decentralization is valued. In their operation organizations sustain asymmetries in form, that define the value content of the division of work alluded to in chapter VIII, as much as they are directed to sustaining the specific activities that may be realized through that division of work.

Thus, we may say that it is the ongoing dynamic of relations between the contexts that primarily sustains their hierarchy, not any inherent "structural" features of the contexts themselves. The asymmetry of power and authority between local, national and international organizations is built both upon the subjects' capacity to gain and broadcast their local knowledge, and upon their belief – driven by ideology – in their own legitimacy, and that of others, to pursue a specific course of action. The specialization of tasks that centralizes decisions and "talk work," and relegates the "unthinking" execution of services at the periphery further sustains this differential legitimacy. Such a division of work is further justified by its outcomes. Peripheral agents develop a "chronic incompetence" through having to apply norms and interpretations to contexts from which they were not derived. This incompetence then calls for further interventions from the center in an attempt to resolve the problems that arise.

The point is even more obvious in the distinction made between issue and response in the subjects' discourse on cholera. As discussed in chapter IV, reflecting the object-subject dualism, people take for granted that the issue of cholera is "out there" as an entity to which they "respond," not stopping to think about how their action vis-à-vis cholera goes on to shape their interpretation of the epidemic. This includes not realizing that their actions are embedded in a pre-existing network of relations and interpretations that assumes that international and national agents know better than local agents what to do, how to do it, and why.

As a result, in the crisis stage cholera was early on classified as a problem that the center should deal with, not the periphery. However, this decision rests upon previously perceiving the local as actually incompetent to deal with the problem, a perception that is fed by ongoing processes that filter knowledge and resources. For example, paying people at the periphery less than at the center in fact sustains a relative concentration of less capable, less trained or less motivated personnel at the periphery (Alvarado, 1994). This speaks to the relation between ongoing agendas and practices as micro constructions. The everyday of people is embedded in the enfolded logic of modernity, with its control, surveillance, and centralization, and with its emphasis on centralized, expert knowledge.

Again, it is important to avoid the temptation of falling into a facile moralization of these relations. For the most, they are institutionalized dynamics that do not respond to the will of individual actors. At the same time, however, they are systems that frequently sustain injustice, and that require volition for their reproduction, so responsibility is not an absent variable. If I point to the asymmetries between contexts, and in doing so question their legitimacy, it is because time and again history has shown that the awareness of taken-for-granted institutions can lead to their active modification through time. Witness the cases of racism and sexism, as most immediately obvious cases in which previously valid distinctions in interpretation and practice are brought out for discussion and willfully modified. The asymmetries that sustain the marginality of some local knowledges is not necessarily the product of a conspiracy, but not doing anything about this once awareness is gained about the issue is indeed a conspiracy of silence among the agents.

A further aspect of the overlapping of localities that has been expanded through the development of modernity is the buffering between the "producers" and the "consumers" of normative models in the system. As the chain of overlapping localities has grown longer in consonance with the expansion of the modern world system, the distance between the givers and the receivers of norms has increased, and their mutual determinacy has been simultaneously buffered. However, given the asymmetry between contexts that I have discussed above, the peripheries' resistance becomes increasingly ineffectual, never even reaching the object of its opposition. Whereas in the 19th-century organizational experience with cholera popular reactions to policy were usually swift, effective, and even violent, in the contemporary setting there is no occasion for the population and more peripheral organizational agents to affect policy makers in any but the most indirect fashion. As we have seen, physicians and government officials were ready targets of popular unrest in the early nineteen-hundreds. In the late 20th century policy makers disappear into an impersonal bureaucracy, where responsibility is no longer traceable, and where indeed there is no tangible object for confrontation. Programs that start out as products of individual experts, for example in the context of a Washington bureau, get absorbed into the chain of overlapping localities, and are later on experienced, again individually, by subjects at the periphery, but this time as local events, with no evident relation to their original authors.

Note, however, that this does not imply that resistance does not occur. Rather, it means that it is confined as a local phenomenon, whose implications, although to an extent systemic, are mostly experienced in the same locality. An example of this is provided by the secular practice in Guatemala of giving a false address to get into hospital, which comes out once again in the case of cholera. In Guatemala City, the two major public hospitals attend inpatients according to the part of the city in which they live. In consequence, when people wish to be admitted to a specific hospital, they will give a false address upon admission. This has significant implications for the epidemiological management of cholera because the cases are referred to local services such as the Health Center for family and contact follow-up. When local health personnel attempt to follow up the case in the community they frequently discover that the address is incorrect, and so are unable to perform their tasks of epidemiological surveillance and prevention. What this shows, then, is that the value given to the

convenience of the central policy makers and care providers (the even distribution of patients among the hospitals) prevails over the convenience of the user. However, it is the local services that are forced to bear the brunt of the problem, in their unsuccessful attempts to trace the patient's address. What we see then, is intermediate agents in the chain of overlapping contexts acting as one-way valves, mediating between peripheral and central localities, letting through influences from the center, but containing peripheral responses.

There is an obvious overlap between what is described here and the concept of hegemony. Indeed, despite local resistance, central and peripheral agents in the system of overlapping localities are bound together by sets of ideas that in their diffusion subtly teach these agents "*to think and behave in certain ways.*" (Kiros, 1985:100; *Cf.* Adamson, 1980) However, there is more than hegemony in the phenomenon, because what we see are agents actively incorporating external prescription into their life experience, not simply as impositions, but as radically reinterpreted pieces of reality. Agents construct local reality not simply in the presence of hegemonic instructions, but rather *through the reinterpretation* of these same instructions. It is this process which makes negotiation and normalization such fundamental processes in the event described: In answering to the objectives of central agents, peripheral agents simultaneously accommodate their own agenda and influence the center, in their activity seeking, and eventually finding, a "middle" ground between institutionalized practice, will, and external limitation or imposition.

Discardable organizations

As the world of modernity continues to expand and become more complex, the potential for quickly escalating, self-aggravating problems seems also to multiply (Perrow, 1984; Gephart, 1993). Cholera has accompanied the increase of urbanization and communications that have been instrumental to the development of modernity from relatively early on. Although it no longer poses a threat to the industrialized countries, it has nonetheless continued unabated in the poorer areas of the globe, both in endemic areas and through epidemics such as that discussed in this work (Pestana de Castro & Almeida, 1993; PAHO, 1991; Evans, 1993; Rosenberg, 1962). Additionally, for some time now it has been recognized that the early hopes for the advancement of a society free of the threat of major infectious diseases were misplaced even in the case of the

industrialized nations. The recent resurgence of tuberculosis and most notably the appearance of AIDS have shown that the achievement of even a precarious balance with a variety of species of microorganisms continues to be an elusive goal for humanity. This suggests that the organizational issues that form the core of this research might be equally important with respect to other contexts.

Analyzing AIDS as a critical problem, Perrow and Guillén (1990) argue that organizations in the United States, specifically in the city of New York, failed in the face of what they characterize as an overwhelming challenge. They find that AIDS caused a breakdown in the capability of the organizations to face it because of three features that are peculiar to the disease. First, it exacts very high expenditures in treatment; second, it generates high levels of fear due to the perceived risk of unsuspected transmission in caregiving; and third, it is associated with stigmatized groups in the U.S., namely, homosexuals and drug users (Perrow & Guillén, 1990:3). They suggest that AIDS acted as evidence of a wider failure of society in the United States in overcoming poverty and discrimination, coupled to the presence of the AIDS virus at a moment when sexual norms were in transition. The focus of their work is upon organizations as units, and although recognizing the presence of broader social determinants, they gauge failure on the organizational scale, measuring "responses" against "issues."

In my research I have found it more useful to see both "issue" and "response" as parts of a complex. Diseases are integral expressions and conditions of the society in which they are present, not simply autonomous entities just *"happening along"* (*Cf.* Perrow & Guillén, 1990:3) and coming into contact with society as if by chance. Furthermore, Fee and Fox suggest that events such as AIDS may be more than casually associated to their socio-historical context (1992). Indeed, Perrow and Guillén also recognize this. They point out that the issue has been dealt with very differently in the United States and Europe. Whereas in the United States AIDS has been moralized, in Europe it has been interpreted as a technical problem, and prevention has been pursued aggressively (Perrow & Guillén, 1990:7, 25). However, these authors don't explore the implications of this for the relation between organizations and society, because they assume that the formal organization constitutes a self-evident unit of analysis. Most discussions of AIDS have similarly taken the organization for granted as

an agent, rather than as an outcome in the ongoing production of social reality, so that indeed all that can be perceived are organizational shortcomings, and all that can be suggested are policy adjustments, without questioning the logic sustaining these organizations and the policy alternatives they realize (*Cf.* Panem, 1988).

In contrast, my reading of the cholera epidemic in Guatemala suggests that the contemporary modern state as a whole, even as peripheral an exemplar as the Guatemalan state, has been eminently successful in absorbing the shock of the cholera epidemic, not only in spite of any perceived shortcomings in individual organizations but indeed *through* the "involution" of the cholera organizations set up initially to address the issue. What many analysts and agents characterize as an organizational failure is the result of states buffering the effects of cholera through the interposition of "discardable" organizations, which absorb the pressure of the crisis while minimizing its effects on the broader institutional framework. The difference with the 19th-century experiences is patent. In both the present and the past encounters with cholera specific organizations were set up to deal with the problem, and their life span was initially short. However, whereas in the 19th century "cholera organizations" were, at least initially, experimental measures of last resort, in contemporary Guatemala, as in the rest of Latin America, cholera organizations were set up promptly and with clear intent. Furthermore, the disappearance of these entities was in good measure an event programmed, if not by the more peripheral agents, certainly in the minds of their counterparts at the center of the system.

In the cholera experiences of the 1800s the focus of the problem was the interface between cholera, as a biological challenge, and society's needs. Organizations sat somewhat experimentally at the edge of this interface. In the contemporary experience organizations again mediate between the event of cholera and society, but the problem is one of fit between organizational agendas and society, not between a threatening organic species and society. While a century and a half ago cholera to a good degree shaped organizations, now it is organizations that shape cholera. In consequence, unlike previous epidemic experiences, it is no longer the biological and material implications of cholera that determine its problematic nature. After all, there is now relative clarity about what organizations must do to prevent and treat cholera, and the effects of the disease on the general health status of the affected

societies is relatively minor. Rather, the problems of cholera derive from tensions between organizational agendas and the interests or needs of society. As a result of this, we see cholera as a disease being resolved efficiently and promptly, but the problems of sanitation and social order to which it points remaining basically unchanged.

In this process the "discardable" organization becomes a fundamental tool of adaptation without radical change. The articulation of cholera to existing organizational agendas has neutralized the attention that the cholera epidemic, in its initial characterization as a crisis, drew to the shortcomings of modern (particularly urban) living. Extending the reaches of fancy, we might say that cholera organizations and their members are the hapless propitiatory victims offered to the disease in an effort to relax its hold on the imagination of society. Through them political and bureaucratic agents can say "we are doing something," and indeed limit the damaging effects of the disease – hence the extremely low mortality rates – without fundamentally threatening the *status quo* of a health system and a state apparatus geared toward cure rather than toward prevention.

Going beyond the limits of the immediate politics of institutional survival, this suggests that, as illustrated in the case of cholera in Guatemala, modernity is not only constructed on the basis of the grand, "profound" institutions of the long term, such as the capitalist economy or state surveillance (*Cf.* Giddens, 1990:55-58, 10). Together with these, modernity is also constructed and sustained by small-scale institutions, whose transitory nature evens out the sudden changes and unanticipated events of an everyday life that is built upon the substratum of organic and physical matter over which society has really only tenuous control.

The role these organizations have played becomes even more apparent when we look at what has happened when regular bureaucracies have indeed been obliged to absorb directly the pressures of the epidemic. Due to this they have neglected their regular functions, thus threatening their long-term survival as their main *raison d'être* is overlooked (*Cf.* Perrow & Guillén, 127-151). Furthermore, they have opened themselves up to criticism, both from people who see cholera as the responsibility of specific cholera organizations – which these bureaucracies are not – and from those

who see cholera as just one more diarrhea, and therefore not meriting the exclusive attention of a whole, established agency.

In this light, the national government's sluggishness in using cholera as an opportunity to modify sanitary conditions offers some evidence of the ongoing trend toward an increased irrelevance of the nation-state in the contemporary scheme of globalization. However, the phenomenon also takes on a more sinister meaning than simply as evidence of organizational weakness and technical inadequacy. Rather, to these endogenous "technological" causes must be added an exogenous interest, either implicit or explicit, in sustaining the status quo of health care models, and of the role of the health sector in the articulation of the modern peripheral state. Many agents already present in the current articulation of the health sector in Guatemala benefit from the status quo in one way or another. Whether we like to admit it or not, the medical profession and other allied health professions benefit from disease more than from health. Similarly, the chemical and medical supply industries are at present geared toward curative more than preventive care. Finally, international cooperation makes sense only in the presence of international asymmetry.

It stands to reason that cholera organizations in a context such as Guatemala could serve the same function of experimenting with novel, localized solutions, much as they did a century and a half ago in Europe and North America. However, this possibility is never fully realized, as these incipient local solutions are preempted by normative models imposed from outside. This appreciation is sustained not only in the macro-organizational context, but equally in the micro-organizational environment of social construction. Weick suggests that *"initial responses [to crises] do more than set the tone; they determine the trajectory of the crisis "* (1988:309). Although this holds true if we take the crisis as an autonomous entity, once we re-embed it in the social context in which it develops, the issue of enactment becomes much broader. It is not so much the "initial response" that determines the trajectory, as the preexisting framework for interpretation that subjects resort to in articulating that "initial response." This framework is a reflection of wider social conditions. Thus, we might say that, save in the most extraordinary of circumstances, it is normality that is enacted in a crisis, not change. The crisis is, in last instance, just a passing aspect, a fluctuation in the ongoing realization of the everyday. The transient organizations of cholera are then temporally

localized enactments of normality that deal with the challenge of the epidemic on its way to articulation with previously existing organizational agendas (*Cf.* Weick 1988:314-316).

That things could be otherwise, with localities devising solutions that are relevant to their own experience, is hinted at by the agents themselves. For example, Pedro's story about success in a community that built its response to cholera on its own previous organization (chapter VIII) shows us that indeed local agents can devise eminently appropriate responses to a major problem, even under conditions of relatively limited technical sophistication. Along lines of policy, the deployment of better trained and better paid personnel at the periphery, provided with a greater measure of autonomy – which are in themselves no earth-shattering policy decisions – could lead to a more balanced distribution of resources, and more importantly, to the making of more locally relevant decisions concerning these resources. The result could be a relative strengthening of local organizational capabilities that could sustain such positive experiences on a broader scale.

Further, the consideration of cholera organizations as "discardable" has important normative implications for the theory and practice of policy design and implementation. If the transitory nature of some organizations makes sense in the overall picture of societies addressing problems, then we should consider that same transience directly in policy prescriptions, in the design of budgetary dispositions and in the training of personnel. Instead of expending energies in resisting the inevitable disappearance of structures after heavy financial, intellectual and emotional investments, such efforts could be channeled both toward the substantive tasks and toward the preparation for new tasks of those involved, once the "crisis organizations" expire.

Finally, a word of caution is again needed here. Although in the behaviors discussed there is surely a significant part of volition by agents, the phenomena under analysis are not simply the result of a conspiracy of elites or bureaucrats to oppress or be negligent about the victims of cholera. Indeed, the individuals I interviewed appeared for the most as persons that are deeply involved with their work and committed to improving society. Additionally, there is no reason to think these are exceptional individuals. Rather, what I am discussing here is evidence of a social order

that is an aggregate of countless willful, strategic or chance events through history. That aggregate has taken on an institutional reality that powerfully shapes the perceptions and actions of contemporary agents. Certainly we may – and should – trace responsibility to individuals for actions performed or neglected, but understanding the implications of these actions for the broader dynamic requires looking further, both into the history of the institutions and of the relations that shape the present pattern of overlapping localities.

Bridging Contexts: A theoretical and empirical challenge

I will end my discussion by exploring the implications of this research for our understanding of phenomena that span multiple formally independent "contexts" and for further research of such problems. There is in this, I think, some potential for growth, but also risks and limitations, to which this research has been no exception.

Kuhn suggests that much of the success and rapid expansion of science can be traced to its definition of the kind of issues that make legitimate research problems. These are characteristically "puzzles," problems with clearly identified limits, that appear as solvable from the outset, even if the specific solution is not known then (Kuhn, 1970). As he points out, this approach has obviously served science well, particularly natural science. However, it has come at a cost, because what we have gained in explanation, we have lost in understanding. In the case of the social sciences, where objects and subjects are never clearly delimited, and where objects diffuse into contexts, this loss has been even more notable (*Cf.* Diesing, 1991:149-180).

Scientific expressions are as indexical as common language expressions, that is, they both equally assume a taken-for-granted background by which people can make sense of these expressions. Recognizing this is important, because frequently concepts and categories are studied across contexts as if they had the same meaning in each. This research shows that even notions as generalized as cholera are not objective expressions, even when used as part of scientific practice. Rather, they are concepts that have been "indexed" *in situ* with respect to a given context (Garfinkel, 1967:4-7). For example, as we have seen in the data, "cholera" for international bureaucrats in Washington may connote sanitary policy and opportunity, among other

meanings. Meanwhile, in the national context the same label evokes additionally ideas about political risk, international involvement, and dealing with panic. Finally, "cholera" in the local context implies much more concretely health care activities, outreach, sick people, and unsanitary conditions. This practical complexity only becomes obvious if we approach the problem of cholera as an issue that bridges social contexts, and through a use of theoretical and methodological tools that allow us to *see* that context-spanning nature of the issue.

Further, in an infectious epidemic there is an interpenetration of material and social phenomena that calls for the bridging of the knowledge and tools of social and biomedical sciences. Additionally, the material and the social aspects of the epidemic overrun the formal limits of the nation-state. Understanding the dynamics of this, and of the bureaucratic and organizational implications it has, requires expanding definitions and tools from specific disciplines and fields of study. For example, Public Administration has traditionally seen the bureaucracy of the nation-state as its main subject. The "international" in Public Administration has traditionally consisted mainly in comparing bureaucracies. In contrast, International Studies look at relations between states and the organizations that realize these relations. However, in both the cases of Public Administration and International Studies the nation-state remains as an unquestioned limit in the definition of relevant units of analysis.

Studying cholera in Guatemala illustrates the need to take elements such as the nation-state, the profession, or the health sector as contingent categories, and to remain willing to go beyond their taken-for-grantedness, both outside and within their limits, in the search for understanding (Held, 1991). A prime tool in this effort is the asking of questions that appear incommensurate to the problem, but which force us to look at phenomena from novel angles. As I hope this research shows, there are insights to be garnered from asking, for example, what micro-social questions about the enactment of cholera in specific situations can tell us about the macro-social problems of modern history, or what history can tell us about the small-scale articulation of cholera-control organizations in a particular context, such as the Guatemalan urban periphery.

Additionally, one of the shortcomings of conventional organization theory has been its almost exclusive focus on organizations in industrialized contexts (Clegg,

1990). This means losing sight of a lot of the diversity present in Third-World organizations, not so much as novel or unusual organizational forms – which as I have argued do not frequently get an opportunity to survive – but rather as adjustments between prescribed organizational design and actual organizational realization in contexts differing from those in which the prescriptions first arise.

More importantly, the bridging of contexts is not just a research exercise, it is part of the phenomenon itself, that needs to be grasped as such. For example, it is interesting to note the relatively sophisticated "sociological" language that national and even local bureaucrats in Guatemala use in accounting for their world. This despite the fact that they enjoy relatively few opportunities for advanced training. Looking at these contexts as autonomous entities makes it difficult to explain this linguistic phenomenon However, considering the articulations between contexts discussed in this research suggests further explanations. In "central" contexts, such as the industrialized nations, social science plays a role in synthesizing the essence of empirical bureaucratic practice, in the process conceptualizing it and representing it in terms of its own "language game." In these core countries, the communities of academics and practitioners and their respective "language games" are only indirectly connected (Astley & Zammuto, 1992). However, these synthetic accounts of practice then flow along the channels of center-periphery dependence (such as the institutions of academic prestige and the policy prescriptions of international bureaucracies), resulting in normative instructions for practice in the peripheral contexts of Third-World countries. The result of looking across contexts is that we see what starts out as everyday bureaucratic practice in a core nation being conceptualized in social-scientific terms, which are in turn embodied in de-contextualized prescriptions for practice in the periphery. This offers a testable, tentative explanation to why we find even relatively unsophisticated personnel in the health sector in Guatemala using abstruse terms such as "the technical-normative level." Such terms have become common-language definitions of specific bureaucratic entities, rather than the formal conceptual categories they were originally intended to be.

A further empirical implication of the bridging of contexts concerns the problematic relation between agents' expectations and the differing contexts in which they are expressed. In subjects' discourse there is a recurrent analogy made between

Level	1st World		3rd World
Phenomenon	Sanitation	→	Sanitation
Conditions	Accumulation Wealth Authority Integration Low technology Autonomy	–?→	Depauperization Poverty Democracy Diversity High technology Dependency

the core and the periphery about the changes needed in order to deal with cholera and its consequences. Coupled to this, an analogy is made about the conditions underlying these changes in the core and the periphery, even though such analogy is not sustainable. Specifically, a modernist assumption is made that sanitary reform in the Third World can proceed as it did in the First World, even when the conditions for that process are radically different in the two contexts. The industrialized nations were able to implement changes in sanitation under conditions of wealth, autonomy, relative authoritarianism, and an unsophisticated technological base. By contrast, changes in the sanitary systems of contemporary Third World countries would have to happen under conditions of poverty, political and economic dependency, and external and internal pressures to guarantee formal democracy and to use sophisticated and usually costly technology. As a result, there is a generalized taken-for-granted discourse that presents an ideal about sanitary practice and expectations for change (*Cf.* Tauxe & Blake, 1992), but which hides the chasm between conditions in each context. The result is either no action, or efforts at implementing "appropriate technology" that run the risk of fitting the sarcastic definition of primary health care as "second rate medicine for third rate people."

Limitations and Challenges

The multi-pronged approach that this research has taken to the problem of organizing for an epidemic has, of course, both limitations and advantages. For one thing, the incommensurability of concepts and empirical referents raises the question about whether I am indeed dealing with empirically continuous phenomena (*Cf.* Roberts, Hulin & Rousseau, 1978). For example, when subjects in an International Agency talk about interacting with national organizations, are they describing relations with the same kind of entities I studied as "national organizations?" Probably only a detailed tracing of the actual relations across overlapping localities would test this

thoroughly. However, it is the social constructs constituting agents' realities that shape these agents' behaviors and appreciations. Thus, we can treat the exploration of the "conflict" between subjective and intersubjective phenomena as a point for further research, rather than as an absolute limitation on the conclusions of this work.

A further problem is the absence so far of a historical perspective specifically about cholera in Guatemala and Latin America. Therefore, it is difficult to tell what elements in the empirical phenomenon can be traced to that history, rather than to the influence of external or contemporary elements. However, this is also a relative limitation, because the trend of globalization and international penetration continues to make the weight of local history and cultural resources increasingly marginal in relation to contemporary practice at the periphery. What agents are increasingly engaged in is adjusting the normative "imports" to their local conditions, rather than developing their native solutions. It is in relation to this process that local history becomes significant, and again offers opportunities for further research.

Finally, there is the issue of the implicit treatment made here of the community. As pointed out in the methods chapter, due to the organizational nature of this research and mainly to limitations in time I chose to use the formal organization as an arbitrary cut-off point for data gathering. Further exploration into the linkages between organizational members and their surrounding communities in each organizational context should offer crucial insights into the nature of organizations as contextualized localities.

In sum, the result of this research is a challenge. Through the case of the cholera epidemic in Guatemala I have experimented with a way of thinking about organizations as embedded within sets of overlapping localities that both move and realize the social order. This is challenging because it implies approaching each locality by suspending belief in our cherished normative assumptions about organizations and granting the locality primacy in the specification of the relevant theoretical categories and causal accounts.

Additionally, I have experimented with methodological and conceptual instruments that allow me to approach that redefined object of analysis. This is also challenging, because it implies searching for means to put together a variety of streams

of data in ways that are analytically compelling, yet also methodologically sound. There is still a lot of work to be done on this (*Cf.* Erlandson, 1993).

The final and most meaningful challenge concerns the return from the theory to the practice of the localities. There is an assumption in what I have said that somehow the overrunning of local intent by central prescription might not be as good as it was traditionally thought. Making this claim, however implicitly, puts me in the position of having to search for the path back from this analysis to the recontextualized improvement of organizations in settings such as the ones analyzed, and from there to a positive impact upon the plight of the community they serve.

Appendices

Appendix 1: Interview guide

[*Introductory comments*]

- As I explained to you previously, I am a doctoral student in Public Administration at the State University of New York at Albany.
- At present I am conducting research for my dissertation, which will deal with some of the administrative and organizational aspects of the cholera epidemic in Guatemala.
- Your insights and opinions will be very valuable to me.
- As I mentioned, I would like to tape this interview, and I wish to emphasize that all you say here will be kept entirely confidential and used only by myself. If I use any of your responses in my final report, I will do so in a way which does not allow it to be associated to you, in order to preserve your anonymity.
- Do you have any questions or comments before we proceed with the interview?

[*Interview*]

1.-In order to get some background, could you give me an overview of what your unit is doing specifically about the cholera epidemic?

-What activities are performed regularly by your unit concerning cholera, and why?

-How did your unit got involved with cholera?

-How does that fit with the rest of your unit's activities?

-How does your work fit in with what you unit does?

-What other units does your unit interact with concerning cholera?

-What do you usually do? Could you describe a typical day's work?

2.-In your experience, do different organizations and/or levels of government have different approaches to the epidemic?

-How have the activities of [local/national/international] organizations that you have dealt with varied from what your organization does?

-Why do they vary?

-[*Elicit stories about specific efforts to fight the epidemic.*]

3.-In your opinion, what are the best ways to address the cholera epidemic?

-Do you think this is being done already, either by your organization or by others?

-[*If not*] Why do you think it is not being done?

-What role do you think the health care professions (physicians, nursing, etc.) should have in relation to the epidemic?

-Do you think this is their role at present? Why/why not?

-What role do you think the community should have in relation to the cholera?

-Do you think this is their role at present? Why/why not?

4.-Why do you think cholera appeared in the continent/Guatemala when it did?

-Why did it not appear before?

-Why has it affected some people more than others?

5.-Is there anything I haven't asked about which you think I should know?

6.-Finally, in order to have a clearer idea of where you are coming from, I would like to ask that you give me a brief description of your professional career, i.e., where you studied, what you studied, where you have worked, and how you ended up here. This is useful to me in order to compare your responses to those of other persons I will interview.

[*Final comments*]

- Thank you very much for your help. Once again, I wish to explain that the information you have given me will be kept entirely confidential and used only by myself.
- If you have any further comments or questions I will do my best to address them
- Finally, I would appreciate if you could give me the name of one or two persons whom you think I would benefit from talking to.

Appendix 2: Sources of historical data

The following is a list of the literature used as primary sources for historical data about cholera.

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