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Contested Illnesses:
A Review and Implications for Green Criminology
-- A Discussion of the book, *Contested Illnesses*

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Brown, Phil, Rachel Morello-Frosch, Stephen Zavestoski and the Contested Illness Research Group (eds). 2012. *Contested Illnesses: Citizens, Science and Health Social Movements*. Berkeley: University of California Press. ISBN; 978-0-520-27021-3 pbk. 324.

In this post I provide an extensive analysis of a recent book, *Contested Illnesses*. In my opinion, this book has important implications for and connections to radical/critical criminology and green criminology, and the concern these criminological approaches share related to social, economic, environmental and health justice. Contested illnesses involve the decision making process surrounding the making of public health policy, and the conflicts and various value positions those public health decisions reference and incorporate. Thus, the story of a contested illness refers to the ways in which various interests are played out in the making of environmental and public health regulations, the social justice implications of the public health regulatory process, and the role that science and affected communities should and do play in that process.

Overview

Contested Illnesses represents the experience and knowledge of several researchers associated with the Contested Illness Research Group at Brown University and their colleagues at other universities. The three primary editors, Phil Brown, Rachel Morello-Frosch and Stephen Zavestocki, and several of the chapter authors are recognizable, important contributors to the health, health-related social justice, social movement and environmental justice literatures. Their collective work has had important

implications for the development of research in these fields, and their views on the process of contested illnesses provides important insights and valuable observations that extend beyond the contested illness process to other forms of policy and law making.

In *Contested Illnesses*, the editors and authors address an important issue in the intersection of health, science, justice, public policy and the political spheres of society: namely, the social and political nature of health related decision making, and the association of that decision making process to differential interpretations and representations of scientific knowledge. In short, this book explores the ways in which the public presentation, understanding, control, prevention and treatment of disease related to forms of hazardous chemical pollutants is shaped by socially and politically relevant interaction between various stakeholders in public health policy debates and decision making.

One of the overall points made in this work which has immediate and obvious criminological relevance relates to the ways in which oppositional values and interests on public health are presented and represented by different groups of stakeholders. These public health stakeholders include state regulators and public health officials, scientists who examine public health issues, industries that create hazardous pollutants and products, communities immediately affected by chemical pollutants and regulations, and the general public. The latter public groups represent what we as criminologists would refer to as green or environmental victims of the industrial process. These various stakeholders have different interests in shaping public policy impacting the control of environmental pollution and toxins and diseases potentially related to exposure to toxic and noxious pollutants. These various stakeholders not only represent the interests of different groups, they also present different perspectives on the causes of environmental diseases, and the role science and the democratic process should play in the control and treatment of diseases. Thus, one of the issues that this book makes clear is that the process of making public health law is not a simple, objective, process, and rather involves the complex intersection of how each of the involved groups makes or states their public health claims, and the working out of oppositional views on the need for public health regulations, and the role science plays in that process.

For criminologists, it is useful to frame the discussion that occurs in *Contested Illnesses* to the various theories of law making ordinarily employed by criminologists to understand how laws and regulations are made or come into being. In the traditional consensus view, the law making process is said to reflect agreed upon values and opinions. The processes described in *Contested Illnesses* challenges that interpretation of law making by pointing out that the process of making public health law ordinarily involves a conflict of values and opinions concerning the need for environmentally related public health rules and policies. The conflict processes involved here clearly indicates that a more appropriate interpretation of the evolution of public health policy is found in conflict theories of law making, which have a long and rich tradition in radical/critical criminology. Radical/critical perspectives on this issue, however, tend to explore class and race dimensions of such conflicts, and as a result generally focus on the relationship between the content of law and corporate interests and the state's role in representing public interests and mediating the public's interests, as represented by the

state, with corporate interests. There are, as this book explores, important interest positions omitted from this traditional radical/critical view of law making. Those additional interests are those represented by public health policy scientists, and organized public interests groups that also represent the public such as public health social movement or environmental social movement groups. In their examinations of the formation of law, criminologists have often neglected directing attention to the role of science and social movement groups in shaping the law.

Of particular interest to the book's authors is the role social movement groups play in this process. Though environmental social movement groups have long attempted to influence the regulation and control of environmental hazards, in recent years specialty community organization or Health Social Movement (HSM) groups have emerged that specifically challenge the regulation and control of environmental hazards due to their health effects. These movements have provided an important forum for community members affected by industrial toxins, providing them with a mechanism to become more actively involved in the policy making process impacting the regulation and control of community hazards. *Contested Illnesses* examines how those groups act, provides examples of issues they engage, how HSMs, regulators, scientists and industry interact in the regulation and control process that defines the nature of contested illnesses, and how the knowledge of this process can be employed to create more effective public engagement in the public health policy process.

The Contested Illness Process

There are a number of ways in which illnesses may become contested. To begin, some group must first pose a question about the health effects of an industrial pollutant or chemical emission. Once that question is raised, other groups offer their interpretation of the situation, using various forms of data and information to stake their claim.

In order to understand this contested illnesses process, it is useful to begin with some background assumptions about how these processes unfold. Not all contested illness processes unfold in the same way, and for the sake of illustration, I propose the following "typical" case. In a "typical" case where a public health claim has been raised with public health or government officials, it is likely that public health officials first investigate and respond to the claim. If the relevant state agency finds any merit to the claim, they are likely to open the claim for public comment, or propose a policy position and invite public comment on the proposed policy. Ordinarily, we can expect that the affected industries are the first to enter into the public debate once a public health claim has been made and publicized, or once the state offers a public health policy or a revision to an existing public health policy. In doing so, industry (represented either by specific corporations or by an association representing connecting corporations in or across industries) may offer scientific evidence questioning the proposed regulations as too severe and limiting. It may also offer economic arguments related to the economically harmful impacts of new or additional regulations on an industry. Industry is obviously guided in making these claims by their economic interests, and their primary interest is often restricting regulations that they believe or at least claim will interfere with the free

market and profitability. Where possible, industry will make reference to null findings from scientific research related to the health effects in question.

Once the claim has been made public and industry has responded, we can expect that non-industry scientists (e.g., those in the employment of Universities and governments) may offer their view of the extant evidence. To illustrate the contested nature of the claim, let us assume that these non-industry scientists propose that the findings from the relevant scientific literature suggest that the proposed regulations are not strict enough to protect public health. At this point, then, there are three obvious conflicting positions representing differential interpretations of scientific data in relation to the specific public health issue in question.

It is also possible that affected individuals and communities may become more involved in the process at this point. Individuals and organizational collectives such as HSMs may offer their own evidence of the health effects of pollution. This evidence may draw on scientific research, but it is also likely that these claims include other information, as the authors of this collection note, in the form of personal stories that specify the possible effects of chemical emissions on community members found in the health stories of community members. That is to say, HSMs may also integrate stories of personal suffering with scientific research in their claims making.

Policy makers must oversee this process, hoping to produce an “agreeable” solution to the contested health terrain demonstrated by the opposing claims presented by each group. This is a complex process of conflict and conflict resolution that endeavors to create a rational policy outcome that takes the position of these conflicting groups into account. In its role as “arbitrator” of these conflicting public health claims, the state must somehow manage to balance these contrasting claims. As social scientists who have examined these processes point out, the state has an interest in mediating these public health conflicts relates to the different and conflicting roles the state simultaneously fulfills in this process. For example, the state must, at one and the same time, comply with its charge to present the public, and in the case of public health rulings, to specifically represent public health while at the same time also representing the interests of corporations in this process. Thus, whenever such contested illness processes occur, the state finds itself in a legitimation dilemma in which it must balance the interests it represents and appear neutral. This is a difficult position for the state to manage, and this type of legitimation problems involves a key problem in democracies between representing public health, on the one hand, and corporate economic interests on the other hand. Unfortunately, *Contested Illnesses* does not provide much guidance on this point, and the one weakness of this book is its failure to explore theories of the state, and how those theories explain internal state conflicts between its role in facilitating capital accumulation (as for example, James O’Connor points out in his classic book, *The Fiscal Crisis of the State*), and the state’s role in protecting and representing public health and public interests, and the state’s need to reinforce its legitimacy when rendering decisions that involve these kinds of conflicting claims.

As the authors of this collection point out, much of what is contested in this

process involves the scientific basis of the various claims posed by the involved groups. In short, we can say that this process involves the social construction of the validity of scientific claims, and which scientific claims will be regarded as legitimate for the purpose of making public health policy. As the authors note, this public health decision making process is also interesting to the extent that it involves determining how social, political and economic interests affect the interpretation of scientific data and the use of science in public policy making. In short, one of the important issues here is that the public health policy making process also reveals the limits of science as a rational frame of reference for public health policy, and in this process we must simultaneously consider the substance of science knowledge, the conflicting interpretations of scientific knowledge offered by different interest groups, and the constraints on “objective” knowledge the rules of science impose.

As Morello-Frosch, Pastor and Sadd point out in their chapter, this latter process requires some elaboration to clarify the potential issues involved. As these authors note, “establishing that environmental pollution causes adverse health effects is an ongoing challenge, particularly where populations are chronically exposed to complex chemical mixtures.” That is, in a typical scenario, the public is exposed to numerous environmental toxins, and discerning which one or which set of chemical is responsible for the given public health problem is made more difficult by the natural existence of this uncontrolled spectrum of toxic chemical exposure.

As a result of this situation of mixed exposure, the primary concern involves one of scientific certainty with respect to attaching a particular chemical and its level of concentration in the environment to a particular disease outcome. That is, because of the ubiquitous nature of many industrial pollutants and their co-occurrence geographically, it is difficult to pinpoint which particular pollutant or chemical hazard may be “the culprit” or cause of any given illness (e.g., kidney versus bladder or lung cancer) in any given individual or community, and whether a given chemical is the cause of a disease hotspot in a particular community that is being contested. Because chemical pollutants do not occur in isolation in human environments, regulators tend to require firm evidence that a chemical pollutant causes harm before it is effectively regulated. This is a very strict scientific requirement. Given the strict nature of this requirement, this position on the level of proof required often leaves regulators to conclude that the evidence of harm for a particular chemical contaminant is not scientifically rigorous or sufficient on its own to justify regulation. As the authors of this chapter note, that result means that “The quest for scientific certainty can paralyze environmental and health policy making” (p. 65). As a result of this focus on scientific rigor in the identification of the causes of diseases, the outcome of the public health regulatory process will often leave the public unprotected from chemical harms.

The Role of the Precautionary Principle in Contested Illnesses

In response to this scientific limitation as it relates to public health policy, environmental health researchers have instead argued in favor of using the precautionary

principle when it comes to rendering environmental health policy decisions. The precautionary principle basically states that when specific causal connections cannot be established in ways that satisfy the strict requirements of science, that other evidence which suggests that the presence of a given chemical produces adverse health effects should also be considered. That is, given additional evidence, the precautionary principle states that regulators should take precautions to protect the public from harm rather than ignore the potential for harm even though the strict causal connections required by scientific rules cannot be specifically illustrated.

The precautionary principle directs that in making public health policy, attention should be given to the implications of a wide range of data on the health harms associated with chemical exposure. Relative to the focus of this book, one of those forms of data that relates to the conflict over contested illnesses involves community input. That is to say, communities represented by individual community members or HSM groups may be able to offer evidence of harm even though these offerings do not meet strict scientific requirements. Nevertheless, the precautionary principle rule suggests that these additional data ought to be considered. In respect to community input, then, the authors of this book propose that we consider several related questions: What can policy makers and researchers learn from community members in affected communities? How should scientific research and policy makers represent community input in policy making? How should scientific data and community input be balanced? These are some of the important questions this book addresses.

Morello-Forsch, Pastor and Sadd illustrate the problems associated with public health decision making outlined above in their analysis of environmental justice issues for students in Los Angeles public schools. The authors note, for example, discovering in their own research evidence which suggests that African-American and Latino children face elevated excessive cancer and respiratory disease risks (p. 69-71). Moreover, their data indicates an association between respiratory hazard risk and poor school performance. That association indicates that exposure to environmental pollutants may adversely impact the educational achievement of African-Americans and Latinos in Los Angeles. While these data indicate a potential risk, they do not necessarily meet the strict requirements for cause-effect established by science. For example, the scientific evidence to date has not been able to clearly identify the biological causal processes that may be involved in linking elevated respiratory hazard risks directly to poor school performance. As a result, the strict rules of science suggest that this association should not serve as the basis for public health policy because the cause-effect sequence cannot be clearly established. At the same time, however, the association between respiratory risk and school poor school performance does meet other scientific standards. For instance this association persists even after controlling for relevant covariates; that is, after statistically ruling out other potential causes of the association. At the same time, even this statistical finding has scientific limits: not all possible covariates can be measured or included in such studies, raising the possibility that the finding may be an artifact of the form of the analysis.

Here, Morello-Forsch, Pastor and Sadd return to their point about the use of the

precautionary principle. In the given case, the precautionary principle would direct policy makers to give additional weight to the empirical findings linking respiratory risk and poor school performance despite the inability of research in community settings to control for all possible correlates of poor school performance outcome, or for such research to identify the exact biological causal processes involved. In other words, when there is uncertainty and there is evidence of harm, the precautionary principle suggests that the harm should not be overlooked because some of the most rigorous requirements for scientific certainty and causal associations cannot be met. The bulk of the available evidence demonstrates harm, and protecting public health means paying attention to that evidence rather than ignoring the potential for harm all together. Unfortunately for public health, the strict requirements of establishing cause and effect sequences and biological causal processes asserted by science tends to favor corporate interests, and also favors lax public health policy. Indeed, corporations often make claims that the scientific evidence does not meet the rigorous rules of science when it comes to establishing cause and effect relating a specific chemical pollutant to a specific health outcome. In such cases, corporation can employ the rigorous rules of science to facilitate their economic interest in lax public health law.

The Social Construction of Contested illnesses

As the editors point out, the contested illness process involves an act of social construction. That act of social construction involves determining whose interpretation of the scientific evidence of harm will count when public health policy is made. This is an important observation, because it means that public health policy may not often be constructed to best protect public health or in ways that best represent scientific knowledge. This observation is also important because the contested illness process, which is also a social justice process and concern, is played out repeatedly across American communities at the national, state, and local levels. As it is played out, affected communities are often disadvantaged when the strict scientific standards noted above are followed to the letter. Moreover, in the contested illness process, as the editors note:

As decisions about social policy and environmental regulation in the United States are increasingly shaped by scientific and technocratic discourse, some communities and most industry stakeholders have used their own data and challenged scientific evidence to advance their interests. Yet the insistence on ‘better’ science in decision making often reinforces dominant political and socioeconomic systems by slowing down policy making, precluding precautionary action, and ensuring regulatory paralysis through (over)analysis. Through this scientization of decision making, debates regarding the costs, benefits, and potential health and social risks of new technologies and industrial production may be dominated by experts who work to ensure that battles over policy remain ‘objective’ and divorced from their socioeconomic and political contexts. . . . [T]hese processes exclude the public from important policy debates and diminish public capacity to participate in the production of scientific knowledge itself (p. 4).

Thus, the problem contested illnesses represent is how best to study and resolve disagreements with respect to public health policies, while simultaneously paying attention to and recognizing the limitations of science, and respecting the rights of communities and affected individuals to have input into this process. In short, the issue here concerns determining the best way to protect the public's health when making environmental policy.

It is all too easy to assume that the solution to these contested illnesses ought to be to allow scientific evidence to shape and control the public health policy outcome. For reasons described above, however, science is not always up to this task, and its strict requirements related to causation may lead to ineffective public health policies that fail to protect public health. Given the conflicts involved in the contested illness process, there are additional reasons to be wary of the public health policy outcomes of this process. For instance, industrial scientists working on behalf of corporate interests may present a picture of the potential harm associated with a chemical pollutant that is consistent with the economic interests of their employers. One might imagine that if this were not the case, these scientists might find themselves looking for work elsewhere. In addition, we must consider that it is entirely likely that the evidence industrial scientists present may be contradicted by the research results produced by independent scientists in the employment of Universities, or that who work for the government or those who work for unaffiliated research groups. Solving the conflict between these various claims-makers in a contested illnesses policy matter is not an easy task, and there is no single solution that necessarily fits all such conflicts.

The contest illnesses dilemma may be exacerbated when, for instance, new chemical pollutants are at issue. Scientific knowledge of the effects of those new chemicals and pollutants may be rudimentary, or insufficient for effectively determining the appropriate regulatory response. The evidence may be contradictory, or there may not be sufficient evidence to reach a sound scientific conclusion about the potential for harm. The ordinary rules of policy making, in such cases, prefer a no response policy. In other words, when a harm can not be established according to the strict requirements of science, then those risks will not be regulated. In this sense, the rule making process is not precautionary, and does not protect the public from possible harm. It only protects the public when a rigorous showing of harm can be made. And for many of the reasons described above, it is difficult to meet that criteria.

An additional issue that must be considered here is that science omits some information in reaching these policy decisions. The authors and editors of this collection argue that one of those important pieces of omitted evidence may be the lived experience of affected individuals and communities. How the experiences and opinions of affected individuals and communities in this process ought to be represented and how they have actually been represented, comprised a large portion of this work.

In taking this focus on contested illnesses, the authors and editors of this book explore what sociologists and criminologists would characterize as the social

construction of harm and regulations, and in this case, public health. In other words, public health decisions are not simply an expression of “good” science; they tend to incorporate value positions of different stakeholders, and the resulting regulations become social constructions to the extent that they reflect social, political, economic and health values and information as represented by various groups. This is the same type of social construction criminologists have recognized as affecting the construction of criminal law since the introduction of Richard Quinney’s (1970) important work on this topic, *The Social Reality of Crime*. In both cases, there is a question about the objective validity of the outcome. Does crime or public health policy represent the objective values of science with respect to identifying which noxious behaviors should be controlled by law? Are these outcomes rather the product of an act of social construction? If they are acts of social construction, whose values and interests do these social constructions represent? These kinds of questions have been key concerns for radical/critical criminologists, and this collection has relevance to green, radical and critical criminology because it explores these issues in the fields of public and environmental health and regulation.

This is not to say that environmental or public health regulations must, by their very nature, be social constructions. What this work implies is that because of the way public health and environmental regulations are currently constructed, that the outcome of that process are often social constructions. But, sometimes the public or environmental health outcome does represent science, in which case we can say that the result is not a social construction.

This brief observation is important because it also points out the limitation of suggesting that all legal outcomes, whether related to criminal law, or public and environmental health, are social constructions. When we say something is a social construction, we state that it has meaning within a given set of social structural relations. In contrast, scientific findings are not a consequence of the relationship between an outcome and social structural factors. Scientific results hold across social structures. Pollutants such as lead, for example, are toxicants regardless of the society in which they are examined. But, the extent to which these toxicants are regulated differs, and it is the difference in regulations not the toxic effects of lead that are a social construction.

The Public, Social Movements and Contested Illnesses

The fact that contested illnesses are a social construction presents several obvious problems. One of those problems is that the resulting public health regulations may be, as radical criminology would predict, lenient, and tend to favor industry and economic interests over public health interests, science and the lived experiences of affected individuals and communities. The fact that law and public policy will tend to represent the interests of the powerful is a well known outcome widely reported in different literatures including, for example, the radical criminological, environmental justice and green criminological literatures. For instance, the environmental justice and green criminological literature that explores government regulations of environmental hazards and differential public health and regulation affects across communities finds that those

outcomes depend on the race, class and ethnic composition of the affected communities. This obvious connection between power and law, however, tends to overlook the core issue this collection addresses: given that contested illnesses are social constructions, what role should the public play in this process? And how should the public's concerns be recognized and integrated into this contest?

As the editors point out, one way that the public can be represented in public policy matters is through the development of populace or grass-roots social movements, and through their long term development into organized and institutionalized health related social movements. On this point, the editors argue that Health Social Movements (HSMs) have been employed to change the nature of the contested illness political process by empowering affected communities and their members to actively challenge the scientization of community health decision making related to chemical pollution by opposing dominant political structures and organizations, and the authoritative position of scientific and professional decision makers. In this process, advocates for community members and the community members themselves who have become victims of not only industrial pollution, but who can also be seen as victims of the public health decision making processes that adversely affect them, can voice their concerns, share their stories and their data, and expose the contested nature of illnesses in communities.

In the process of contesting social and environmental policies related to the regulation of pollutants, for example, community members and their advocates represented by HSMs create an interactive process of decision making. That interactive decision making process, which "normally" involves debates over the merits of scientific data related to pollution and health impacts stated primarily by state regulators and industrial stakeholders, is opened for increased public input by HSMs. In doing so, HSMs help shape the regulatory process, and enhance democratic participation in that process. In addition, in that process, as Brown et al. argue, HSMs "shape and reshape science, and science in turn shapes and reshapes health social movements" (p. 5).

Little is known, however, about HSMs, how they emerge, their patterns of development, the development of HSM coalitions, and the processes employed by HSMs to contest illness. The purpose of this book is to explore those issues. Brown et al propose and employ the various chapters in this book to explore three social forces and processes that shape the development of HSMs (pp. 5-6): (1) growing public awareness of the limits of scientific and medical knowledge concerning the impacts of exposure to chemicals that cause health problems and the impact of economic interest on shaping public health knowledge debates and outcomes; (2) bioethical concerns that shape and limit the production of scientific knowledge; and (3) the "collective drive to enhance democratic participation in the scientific enterprise."

Exploring Contested Illnesses: Summary

This is a strong collection of articles designed to examine the issue of contested illnesses. The various chapters in this book provide the background for understanding HSMs and the HSM process as these relate to contested illnesses. To provide some idea

of the issues examined, I briefly outline the contents of the individual chapters.

Chapter 2 examines the theoretical framework related to contested illnesses and social movements that form the basis for the analysis of contested illnesses. It examines the role of EHMs, or Environmental Health Movement, and the challenge these groups present to the normal process of science in relation to public health decision making. As the authors note, EHMs explore the lived experiences of those with illnesses as representing a challenge to the authoritative process of public health rule making. In summarizing this view, the editors state that EHMs allow for an exploration of the political economy of health and disease. And since contested illnesses are social constructions, criminologists and sociologists will recognize the important role political economy plays in this social construction process.

Chapter 3 explores the role of qualitative methods in understanding the contested illness process. Clearly, if EHMs and HSMs have an impact on the social construction of public health and contested illnesses, then qualitative methods play an important role in the study of those groups, the processes they employ to challenge authority, and the kinds of information they present to represent their positions.

Expanding on this focus, chapter 4 offers an ethnographic approach to the study of contested illnesses. The kind of ethnographic approach offered here employs field analysis of groups and their interests, and the ways in which contests emerge and are shaped, including the formation of coalitions. These ethnographies are undertaken using a variety of data collection techniques (content analysis of documents; interviews with participants of various groups; and participant observation), with an underlying emphasis on assessing how this information facilitates achieving the policy goals of the involved groups.

Chapters 5 through 9 present case study materials on specific contested illnesses to illustrate how the contested illness process is worked out in given cases. In order to learn more about the general contested illness process and whether it produces empirical regularities, a large number of such studies would be needed to serve as the basis for a pool of data that could be used for empirical analysis. These five cases, while instructive and excellent, are themselves a limited cross-section of the relevant data on contested illnesses, and one cannot therefore generalize too far from these chapters. The various chapters in this collection examine contested illnesses related to social justice in Los Angeles schools, Gulf War illnesses, asthma in Roxbury, Massachusetts and Harlem, New York, residential illnesses among Cape Cod residents, and breast cancer among residents in Long Island, New York, San Francisco, and Massachusetts.

The information presented in chapters 5-9 are supplemented by three additional case studies (chapters 10, 11 and 12) that explore the results of “cross-movement” coalition formation. These three chapters explore the contested illness and coalition building processes in Boston public schools related to the negative health impacts of noxious cleaning agents; in New Jersey related to Right-to-Know legislation; and in relation to a Brown University project on a collaborative HSM project between

researchers, state planners and community activists in Rhode Island.

In the final section of the book, the authors explore ethical and scientific issues in reporting research results to communities (chapter 13), and issues related to institutional review board (IRB) clearance for community-based participatory research (CBPR) projects. The final chapter sums up these materials, explores funding opportunities for this kind of research, the kinds of educational training needed to produce researchers who can examine these issues efficiently and effectively, and future research. The appendix, which is supplemented by access to additional online materials, outlines some of the key lessons the researchers learned in undertaking CBPR.

Criminological Implications

From a personal perspective, this book has important implications for the kinds of research in which I have been engaged for the past two-and-a-half decades, and it is useful to have access to literature on these issues that represent research from other disciplines. In my view, this book has important implications related to a number of criminological issues including:

(1) the consensus-conflict debate on the construction of laws and regulations, and issues related to the objectivity of law making and the influence of science and democratic participation on the law making process;

(2) how various groups engage in the actual process of the social construction of law, public health and social justice, and how interests and value along with science become incorporate into or excluded from law-making;

(3) issues relevant to the study of environmental justice, and particularly how the interests of communities become incorporated or excluded in legal and policy decisions, and the potential role class, race and ethnicity plays in this process.

(4) the study of regulatory enforcement outcomes, which after all must reflect in some way the social construction of contested illnesses, but also related to how enforcement also shapes the nature of the contested illness process by reinforcing or undermining public health policy and regulations;

(5) the relationship of these various issues to green criminology and the examination of green crimes and justice, public health crimes, and green victimization of the public;

(6) the startlingly clear implications of this research for criminologists who examine social and economic justice, long a concern in radical criminology, the political economy of justice, and race, class and ethnic conflicts as these play out in the regulatory processes;

(7) the study of social justice movements and community movements related to

crime issues relevant, for example, to realist criminology, and the study of environmental social movements;

(8) cultural criminology studies with their focus on how individuals engage in the construction of situations and behaviors; and

(9) even in relation to peacemaking and restorative justice research with respect to the ways in which the regulatory process of constructing illnesses allows victims and offenders to interact and confront one another, and potentially come to understand one another's views.

In sum, this is an excellent book, well worth reading. While it focuses on the construction of contested illnesses, it contains significant insights that will benefit criminologists interested in law making, social justice, crime control, social movements, and radical, critical, and cultural criminology as well.



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