CHAPTER 9

Social Theories of Ignorance

MICHAEL J. SMITHSON

DESPITE THE THREAT of insoluble problems and paradoxes, it is possible to attain useful knowledge about ignorance. For Western intellectuals, four characterizations can clear a path to initial insights:

- I. Ignorance is socially constructed but this realization neither necessitates relativism nor a denial of "real world" influences.
- Ignorance is not always a negative aspect of human affairs. In fact, it
 is an essential component in social relations, organizations, and culture. People are motivated to create and maintain ignorance, often
 systematically.
- 3. Ignorance is not invariably a disadvantage for the ignoramus.
- 4. Ignorance is neither marginal nor aberrant in its impact. It is a pervasive and fundamental influence in human cognition, emotion, action, social relations, and culture.

Most of this chapter is devoted to elaborating these four points in hopes of advancing our understanding how ignorance is constructed, the work it does, and the impacts it has. First, however, we must attend to two preliminary issues: terminology and what constitutes a genuinely social theory of ignorance.

A CONFUSION OF DEFINITIONS AND TERMINOLOGY

One difficulty plaguing "ignorance" is that the scattered literature on the topic lacks an agreed-on nomenclature. Let us begin by considering terms for the overarching concept in this domain. Böschen and Wehling use the term *nichtwissen*, whose English equivalent is "nonknowledge." This usage echoes earlier proposals for a "sociology of nonknowledge." A related, if less common, term is *nescience* (total ignorance). Alternative

usages have referred to a social theory of *ignorance*.³ Knorr-Cetina introduces the term *negative knowledge*, that is, knowledge of the limits of knowing, mistakes in attempts to know, things that interfere with knowing, and what people do not want to know.⁴ This concept is quite similar to *closed ignorance* in Faber and Proops.⁵ Outside the social sciences, the most popular general term seems to be *uncertainty*. For example, this is so in artificial intelligence.⁶

Knorr-Cetina and I have accurately identified the main problem here, namely that anyone referring to ignorance cannot avoid making claims to know something about who is ignorant of what.⁷ It probably does not matter greatly what term we choose so long as our definition of it recognizes this point. In this chapter I will use *ignorance* as the generic term.

The intuition that there might be different kinds of ignorance has motivated a number of scholars to propose various distinctions and taxonomies.8 One of the most popular distinctions is absence or neglect versus distortion.9 Another popular distinction is reducible versus irreducible ignorance, as suggested in the negative-knowledge concepts articulated by Knorr-Cetina and Faber and Proops. 10 A third, often implicit, distinction is between that which can be known versus that which must not be known (for example, the pioneering work by Douglas on taboo).¹¹ Taking a cue from Unger, I distinguish the active voice (ignoring) from the passive voice (being ignorant). 12 Brown echoes this when he observes that "In science, we may be missing useful knowledge either because: (1) we intentionally close a problem (act of ignoring) or (2) we are unaware of alternative views of the world, or their potential utility (ignorance)."13 In a similar vein in this book, Proctor distinguishes among ignorance as a native state (or resource), ignorance as a lost realm (or selective choice), and ignorance as a deliberate and strategic ploy (active construct).¹⁴

Some taxonomies of ignorance have emphasized distinctions that operate at a meta-level rather than describing the nature of different kinds of ignorance per se. The most popular distinction is between knowing that we don't know and not knowing that we don't know. I prefer the terms conscious ignorance and meta-ignorance.

Several disciplines have produced relatively sophisticated and productive distinctions among special kinds of ignorance and uncertainty. In

addition to at least three major schools of probability theory, several different kinds of mathematical uncertainty measures have been proposed, in the setting of alternative mathematical uncertainty frameworks such as fuzzy set theory and belief functions. Scholars of ignorance could benefit from these developments in two ways: as conceptual suggestions for their own theories and as exemplars of distinctions-in-use by a particular linguistic community.

Should we even attempt a definition or taxonomy of ignorance? Brown and Rogers eschew taxonomies in their study of miscommunication on the grounds that classification uncouples phenomena from their contexts, thereby sacrificing interpretive richness.¹⁷ But it is not difficult to come up with definitional criteria that are sensitive to both context and viewpoint.

My definition seems to handle these problems reasonably well: "A is ignorant from B's viewpoint if A fails to agree with or show awareness of ideas which B defines as actually or potentially valid." This definition allows B to define what she or he means by ignorance. It also permits self-attributed ignorance, since A and B may be the same person. Most importantly, it incorporates anything B thinks A could or should know (but doesn't) and anything that B thinks A must not know (and doesn't). B's notions about ignorance may be as context-dependent and subjective as required.

Two aforementioned distinctions also are generally helpful, which are not always clearly made in writings about ignorance. The meta-versus primary-level distinction is crucial; we must specify whether meta-knowledge or meta-ignorance is our focus as opposed to knowledge and ignorance themselves. Likewise, a ubiquitous and important distinction is between ignorance that people think is reducible and ignorance that is irreducible.

How can we assess what other typological distinctions are worth making? I suggest four criteria, namely whether candidate kinds of ignorance:

- 1. Are consistently distinguished from other kinds when referred to in communication by members of the same linguistic community
- 2. Are accorded statuses or roles distinct from other kinds in the same situations or for the same purposes in social interaction

- 3. Produce different social consequences for those to whom they are attributed
- 4. Are (dis)preferred to other kinds of ignorance

An example fulfilling the first criterion is Hacking's observations of how the term *probability* changed meaning with the advent of modern probability theory. ¹⁹ The second and third criteria are exemplified by the belief that the consequences of being found out uttering a falsehood will be worse than being found out omitting part of a truth (for example, Burgoon, Callister, and Hunsaker's investigation of equivocation or omission versus falsification in doctor-patient interviews in which about 85 percent of the participants admitted to omission but only 34 percent admitted to falsification). ²⁰ Finally, an example of the fourth criterion is evidence that for many people probabilistic uncertainty is preferred to ambiguity, which in turn is preferred to conflict. ²¹

Although I am among those who have proposed all-weather taxonomies of ignorance, I regard it as clearly advisable for researchers to use criteria such as the four suggested above to guide their choices of terms and definitions. For instance, if we wish to understand how artists in the Dada movement used "uncertainty" and "chance" in art making then we should start by understanding what they meant by these terms and how they used them before imposing our own terms or definitions.

CONSTRUCTIVISM AND IGNORANCE

Whereas it is very difficult to know anything directly about our own or anyone else's ignorance, it is not as hard to find out about people's representations and accounts of ignorance. Ignorance, like knowledge, is largely socially constructed. The study of how people represent, explain, justify, and use ignorance also has plenty of room for debates among constructivist positions ranging from relativism to realism.

Most of the literature on uncertainty in disciplines such as economics, psychology, and (to a lesser extent) communications presupposes agreement among all stakeholders on what constitutes knowledge and ignorance. Yet it seems obvious that the behavior of a dugong in waters off Cape York, Australia, will convey rather different "information" to a marine

biologist and a Torres Strait Island fisherman. Accordingly, an in-depth understanding of how ignorance is construed and constituted requires attention to the following particulars. First, what claims are made regarding who is ignorant about what? Second, how do these claims match on aspects of what knowledge and ignorance are, and what can and cannot be known? Third, how are stakeholders using and responding to their own and others' claims about ignorance? What are the consequences of these notions about ignorance in social interaction?

Conversely, constructivist theories have tended to be biologically, psychologically, and economically blind. This error should be avoided in social theories of ignorance, which, after all, concern attributions about mental states and processes. Material from cognitive psychology, ethnology, communication studies, and behavioral economics can help establish connections between ignorance and relevant phenomena, such as selective attention, denial, forgetting, miscommunication, privacy, and trust.

CULTURAL SOURCES

Where, in our cultural stock, do our ideas about ignorance come from? I propose two principal, though not exhaustive, sources: *commonsense realism* and *commonsense sociality*. Commonsense realism encompasses everything we believe or think about how the nonsocial world works, including sacred as well as profane domains (to invoke the Durkheimian distinction). Commonsense sociality refers to our beliefs about the social world and includes our theories of mind. Both kinds of common sense are essentially realist. Regardless of the ontological or epistemological positions adopted by scholars and researchers, as Rosa points out, "realism—the idea that a world exists independent of percipient human observers . . . is the bedrock of our commonsense ideas of the world around us" and, more pointedly, many laypersons are ontological realists.²³

Although ignorance may be socially constructed, we should be openminded about the origins of our primary metaphors for ignorance. After all, some of them appear to be shared with other species and may have been selected in evolutionary processes. The examples for which we have the best evidence of this are the temporal and spatial analogues of uncertainty. Many species (including ours) behave as if events or influences that are nearby or in the near future are more certain than those farther away or further into the future (see Rachlin for an excellent overview of the research on delay).²⁴ The underlying metaphor is that certainties are here and now. Uncertainties are later and farther away. Delay is uncertainty. Distance is uncertainty.

Even the hallmark of a "theory of mind," namely the ability to infer a state of ignorance or false belief in another organism, may not be unique to humans. In humans, it emerges almost ubiquitously in early childhood at about 3–4 years of age, but the extent to which it manifests itself in culturally specific ways is an open question.²⁵

WHAT IS AND WHAT IS NOT A "SOCIAL" THEORY OF "IGNORANCE"?

Put simply, a social theory of ignorance should be about ignorance and it should focus on ignorance with sociocultural origins. The literature on uncertainty and ignorance frequently conflates theoretical concerns. This is an attempt to provide some elementary but helpful clarifications by distinguishing among four different kinds of accounts that focus on ignorance.

- I. *Ignorance as encountered in the external world*: Accounts of how ignorance and uncertainty arise in the nonsocial world. These include science (and scientific accounts of the limits of science, compare Horgan), as well as epistemological and religious frameworks that make claims about nonknowledge.²⁶ These accounts make strong claims about meta-knowledge and explain ignorance in exogenous (and usually nonsocial) terms.
- 2. Ignorance as emergent, constructed, and imposed: Accounts of how ignorance and uncertainty are constructed, imposed, and manipulated by agents. These accounts treat ignorance as at least partly socially constructed. In some cases, ignorance is deliberately or intentionally constructed, whereas in others it emerges as a by-product of some social process. Either way, these can be genuinely social theories of ignorance.
- 3. *Managing under ignorance*: Accounts of how people think and act in uncertain environments. Some of these accounts may invoke or refer

- to ignorance and uncertainty, but they are not necessarily theories about those topics.
- 4. Managing ignorance: Accounts of how people think about ignorance or uncertainty and how they act on it. The distinction between this kind of account and (2) is admittedly fuzzy. Accounts in (2) tend to emphasize the notion that the construction and distribution of knowledge and ignorance are implicated in power relations. Accounts that fall in this fourth category place greater emphasis on individual agency, the micro-level, focusing on how people conceptualize, represent, negotiate, and respond to ignorance.

Only theories in the second and fourth categories can become fully fledged social theories of ignorance. Much of the recent sociological literature on risk falls into the third category and therefore cannot form the basis for a social theory of ignorance. Both Beck and Giddens claim that an upsurge of ignorance, indicated by unpredictability, lack of control, and unintended outcomes, are a major driving force of contemporary modern societies.²⁷ But their accounts neglect the issues that would need to be addressed by a social theory of ignorance. Neither fleshes out any theory of how people might come to believe that ignorance has increased (to say nothing of whether their own or someone else's has increased), what kinds of ignorance people think have increased, or even how people conceptualize their own and other people's ignorance.

In contrast, much of the work in the present volume and other work by its contributors falls squarely in the second category. Robert Proctor's account of efforts by the tobacco industry to obfuscate the link between smoking and lung cancer is an exemplar of ignorance strategically created or imposed.²⁸ Likewise, Michaels and Monforton explicate a strategy whereby opponents of health and environmental regulations "manufacture uncertainty" by calling into question the validity of the science on which the regulations are based.²⁹ In another vein, Schiebinger provides thoroughgoing examples of how colonial period European scientific and social priorities were oriented to pursue some kinds of knowledge and neglect others.³⁰

Theory and research in categories (2) and (4) can fruitfully exchange ideas and findings with those in category (3). For example, in line with the

aforementioned doctor-patient interview study by Burgoon, Callister, and Hunsaker, Brown and Levinson's work on politeness suggests that people intending to be polite to one another will resort to what they consider to be ambiguity or vagueness more than outright distortion or deception.³¹

THE NEGATIVE BIAS TOWARD IGNORANCE

Western intellectual culture is predominantly about banishing or reducing ignorance, and negative associations with ignorance are the default, even though this is manifestly not so in quotidian social life. Common metaphors for ignorance are negative.³² For example, ignorance is blindness; to know is to see. Or knowledge is power; ignorance is helplessness and impotence. Some of the best illustrations of the overwhelmingly negative bias toward uncertainty and ignorance in the human sciences occur in the psychology and communications literature. However, both of these disciplines also yield valuable concepts and insights for agnotology. I will briefly examine the views of uncertainty and ignorance in psychology and communications studies.

There are, broadly speaking, three traditional normative orientations regarding how people deal with the unknown in psychology. Perhaps the oldest is the "Knowledge Seeker," contained in the psychoanalytic canons for the well-adjusted individual and found in most branches of ego psychology. This view champions the person who seeks novel information and experience, is open to full and honest communication, can tolerate uncertainty and even ignorance in the short run in order to gain knowledge, and who is not defensive about prior beliefs.³³

The second tradition, the "Certainty Maximizer," concerns the debilitating consequences of uncertainty, unpredictability, and uncontrollability for the affective, cognitive, and physiological capabilities of the affected organism. Most of the evidence for this viewpoint originates from research concerning learning and adaptation. But an entire set of emotion-based theories also proposes that anxiety is a consequence of uncertainty. Thus, there is a natural tension between this tradition and that of the "Knowledge Seeker."

The third tradition, the "Intuitive Statistician-Economist," originates from psychophysics, perception, and cognitive psychology, and reflects

information-processing models of cognition. It is primarily concerned with criteria for rationality in judgment and choice, and the dominant normative viewpoints have been Bayesian probability and a view of humans as hedonic (seeking pleasure and avoiding pain). This view has a lot in common with neo-classical economics.³⁵

Despite the obvious tensions among these three perspectives, they are underpinned by the assumption that ignorance is to be reduced (by gaining knowledge or applying logical systems of rules to quantifying and managing it) or banished altogether. There is a potentially interesting but largely unexplored set of linkages between ignorance (and knowledge), emotional responses, moral assessments, and thereby legitimation. For example, ignorance can be used by the ignoramus as a justification for evading culpability or responsibility. In many cultures, education and other forms of knowledge transmission are moralizing projects; so too are ignorance arrangements such as secrecy, privacy, and the protection of innocence. While the exploration of these linkages should not be limited to psychology, that discipline is well equipped to undertake certain parts of this task.

Scholars in the domain of communications have a longstanding interest in misunderstanding and miscommunication, two topics clearly related to ignorance. Until about fifteen years ago communication studies were severely hobbled by what Coupland, Wiemann, and Giles call a "Pollyanna" perspective, in which the default assumption was that miscommunication or misunderstanding was "aberrant behavior which should be eliminated."³⁶ The negative connotations of terms for these phenomena (for example, "miscommunication," "breakdown," or "failure") were also built into communication theories and research programs (for example, the overwhelming emphasis on studying how to detect deception rather than studying how it is constituted and the often essential roles it plays in social interaction).

The literature on self-disclosure provides a good case in point. A pioneer of this research, Jourard claimed that people's psychological health is indicated by an ability to make themselves "fully known to at least one other significant human being." Self-disclosure thereby is identified with intimacy, which in turn is privileged as an ideal kind of relationship. McCall and Simmons, and Goffman were early dissidents from the view

that complete communication would solve all problems in human relations.³⁸ As McCall and Simmons pointed out and as Goffman illustrated numerous times, many important kinds of social interactions and arrangements would be impossible without some unshared perceptions, secrecy, and even deception by the participants.

As in psychology, most communications researchers assume that people are motivated to reduce or banish ignorance and uncertainty.³⁹ Exceptions include Babrow, and Afifi and Weiner.⁴⁰ Afifi and Weiner's perspective is noteworthy because it attempts to incorporate aspects of interpersonal exchange and competing motives to seek or avoid information.

A minority literature in communications and organizations studies brings attention the idea that shared communication or meanings are not necessary for effectively coordinated action. Weick observes that the coordination of action is more important than the coordination of meanings or beliefs for organizational functioning.⁴¹

A more radical stance is that unshared understanding actually is essential for some pervasive forms of social life, as in Goffman's work. Eisenberg is among the few communications scholars to have gone so far as to suggest that lack of shared understandings can enable more effective collaboration than shared understandings would.⁴² Likewise, Conrad points out that many organizations demand and reward people for closed rather than open communication.⁴³

TOWARD A BALANCED VIEW OF IGNORANCE: MIXED MOTIVES AND INTERESTS BOUNDED RATIONALITY AND CONFIRMATION BIAS

Contrary to the view of ignorance and uncertainty as primarily negative, human engagement with ignorance or uncertainty is almost always a mixed-motive enterprise. People sometimes are motivated to discover or create, maintain, and use ignorance (their own as well as others'). The very concept of research, for example, presupposes conscious ignorance about the object of research at the outset; otherwise there is nothing to research. Numerous social relations depend on systematic ignorance arrangements. Trust and politeness are obvious examples. The cohesion and smooth operation of many organizations and institutions hinge on

ignorance arrangements, and not only (or even typically) for maintaining power differentials.

It is not difficult to find examples of motives for people to remain ignorant about information directly relevant to themselves even when that information is readily available. The uptake rate on genetic marker tests individuals with a hereditary risk of a life-threatening disease such as Huntington's chorea or colon cancer is notoriously low, and the same is true regarding the diagnosis of carrier status of such conditions.⁴⁴ More "positive" examples include the majority of parents-to-be not wanting to know the gender of their unborn child, social arrangements such as surprise gift giving, entertainment (for example, spoiling the ending of a novel or movie), and games.⁴⁵ These examples highlight the cultural and motivational stock from which people fashion decisions about when to know and when not to.

Two strands of empirical and theoretical work in cognitive psychology invoke the idea of generalized and pervasive tendencies to avoid information that do not seem entirely reducible to hedonic motivations. One is the "bounded rationality" view of how people make decisions under uncertainty. The other is the literature on "confirmation bias." Both are important because, although they take ignorance and uncertainty as unproblematic, they highlight universal tendencies that militate against the notion that people indiscriminately seek information.

The *bounded rationality* approach was first articulated by Simon partly in reaction against the rational-hedonic model in neo-classical economics. ⁴⁶ Humans and other animals make judgments and decisions not only under uncertainty but also under limitations in cognitive capacity and time. The result is that people use mental shortcuts called *heuristics* that are fast and cognitively frugal but also adapted to environmental structures. ⁴⁷

Confirmation bias, on the other hand, refers to an information processing wherein "one selectively gathers, or gives undue weight to, evidence that supports one's position while neglecting to gather, or discounting, evidence that would tell against it."⁴⁸ More specifically, there is widespread evidence that this bias can operate unconsciously.

Most explanations for confirmation bias point to how it reduces cognitive load. A crucial mistake in many perspectives that privilege knowledge over ignorance is the failure to realize that knowledge seeking and

possession are not costless. The early literature on foraging behavior is pioneering in this regard, taking into account energy and time costs in search strategies. There are also social costs in seeking information. Directly interrogating someone, for example, is socially inappropriate or costly in many circumstances.

IS IGNORANCE ALWAYS A COGNITIVE DEFICIT?

Ignoramuses are not always worse off than knowledgeable folk; in fact there are plenty of contexts in which it can be demonstrated that they are better off. Imagine for a moment that humans were endowed with the ability and a compulsion to indiscriminately absorb all information that came their way and retain all of it for a lifetime. As Luria concluded in his study of just such a person, higher cognitive functions such as abstraction or even mere classification would be extremely difficult. ⁴⁹ Information acquired decades ago would be as vividly recalled as information acquired seconds ago, so older memories would interfere with more recent and usually more relevant recollections.

William James proposed that forgetting is just as important as remembering and to link it with selectivity of information processing.⁵⁰ A more elaborate version of this functionalist argument is that "the memory system (a) meets the informational demands stemming from environmental stimuli by retrieving memory traces associated with the stimuli and (b) acts on the expectation that environmental stimuli tend to recur in predictable ways."⁵¹

Schooler and Hertwig's paper addresses another relevant connection, namely how forgetting facilitates the use of inferential heuristics that also trade on environmental structures.⁵² These are the recognition and fluency heuristics, both of which require partial ignorance. To understand the *recognition heuristic*, consider this question: "Which city has the larger population, Pasadena (California) or Pasadena (Maryland)?"⁵³ If we do not know the populations of those two cities, the recognition heuristic says that if we recognize one city (say, Pasadena, California) and not the other then we choose the recognized city. Recognition of a city is correlated with its population (as I am writing this, Pasadena, California, has about 145,000 people, whereas Pasadena, Maryland, has about 12,000). The *fluency*

heuristic (for example, Kelley and Jacoby) is quite similar, stipulating that the city that is more fluently or rapidly recalled will be the one selected.⁵⁴

Goldstein and Gigerenzer demonstrated that a greater number of correct choices (for example, which of a pair of German cities has the greater population) can be made by ignorant decision makers (for example, American university students) than by more knowledgeable decision makers (for example, German citizens).⁵⁵ Ignoramuses are not always at a disadvantage.

SPECIALIZATION, PRIVACY, TRUST, POLITENESS, AND LEGITIMATION

Now let us move to a more social (or at least interpersonal) level and explore the adaptive interests and functions served by negotiated ignorance arrangements. I will briefly survey five of these here: specialized knowledge, privacy, trust, politeness, and legitimation. The first two exemplify truly social ignorance arrangements as opposed to unilateral ones such as secrecy or deceit. The second pair, trust and politeness, are examples of social relations and modes of social conduct that mandate or even require ignorance. Finally, legitimation concerns the uses of ignorance to justify actions and choices.

Specialization is a social ignorance arrangement. The stereotypical explanation for specialization is that it arises when there is too much for any one person to learn everything. But viewed from an adaptational standpoint, specialization is an example of spreading risk in three respects. First, the risks of direct learning (versus vicarious learning, which is less risky) are spread across the population by diversifying learning. Second, the risk of being ignorant about crucial matters is spread by diversifying ignorance. Third, the risks associated with bearing knowledge also are diversified. As with any kind of risk spreading, specialization requires various forms of social cooperation to yield these benefits.

Privacy is an example of another kind of social ignorance arrangement. Privacy often has been construed as control over access by others to information, mainly about the self. As Warren and Laslett point out, privacy involves a consensual and essentially cooperative ignorance arrangement, whereas secrecy is unilaterally imposed.⁵⁶

Organized specialization and privacy, along with other consensual social ignorance arrangements, are entwined with trust. For instance, effectively functioning expertise requires that nonexperts trust experts to warrant only the knowledge they possess and not to falsify evidence or conclusions within the scope of their expertise.

Despite long-running debates about the nature of trust, there is wide-spread agreement among scholars that trust "entails a state of perceived vulnerability or risk." A primary source of that risk is a requirement that the truster remain partially ignorant about the trustee. Trust is not about concealing information from others, but trust relationships (for example, friendships) do entail a kind of privacy. If a person believes another is monitoring them or insisting that they self-disclose or account for their actions, that person will infer that the other does not trust them.

Yamagishi and his colleagues argue that trust and "commitment formation" are alternative ways of reducing the risk of being exploited in social interactions.⁵⁸ Commitment formation involves the development of mutual monitoring and powers to sanction and reward each other's behavior. However, the reduction of transaction costs in commitment formation via uncertainty reduction comes at a price, namely the difficulty and costliness in exiting from the relationship and foregoing opportunities for form other relationships. Trust, on the other hand, entails running the risk of being exploited but increases opportunities by rendering the truster more mobile and able to establish cooperative relations more quickly. Trust, therefore, is both an example of a social relation that requires tolerance of ignorance and also trades undesired uncertainty (the risk of being exploited) against desired uncertainty (freedom to seize opportunities for new relations).

Polite social interaction is another important example of how social relations trade on ignorance. In polite conversation, conversationalists do not expect to deal in the truth, the whole truth, and nothing but the truth. Brown and Levinson elaborate various strategic requirements of politeness. ⁵⁹ As I have pointed out, those strategies often are achieved via disinformation (for example, promoting a false impression of approval), or by referential abbreviation (particularly vagueness and ambiguity, as in tactful utterances). ⁶⁰

The employment of vagueness and ambiguity in communication serves many of the same purposes in polite conversation as it does in other settings where participants want to promote cooperative goodwill, even if some clarity is sacrificed for it. Eisenberg claimed ambiguity is used strategically in organizational communications for several purposes. One is to achieve "unified diversity," whereby a diversity of interpretations of such things as mission statements or organizational goals are permitted to exist and dysfunctional conflicts are avoided. Another is to enable deniability, for example, the ability to claim that a face-threatening interpretation was not the intended meaning of what was said. A third is increasing capacity for organizational change and adaptability by permitting diverse possible interpretations of organizational goals and rules while still appearing consistent. Eisenberg's main insight is that fully clear communication is not always as effective as ambiguous communication and ambiguity often is highly functional.

Finally, let us consider ignorance as a legitimating influence. Ignorance is used in various guises to justify inaction, maintenance of the status quo, opportunism, evasion of responsibility or culpability, and risk management policies. For example, Western legal traditions distinguish between civil cases in which a guilty verdict may be returned on the "balance of probabilities" and criminal cases wherein guilt must be established "beyond reasonable doubt."

However, justifications for actions and choices on the basis of ignorance abound in mundane life as well. Johnson-Hanks's ethnographic research on Southern Cameroonian women's intentions and actions regarding marriage and childbearing is a striking case in point. Life under the twenty-year economic crisis in Cameroon encompasses not only economic hardship but a "generalized state of distrust." The extreme uncertainty associated with the crisis accounts for "incompetence, graft, sexual infidelity, school failure, and even witchcraft." It also legitimates the rejection of planning and ascription of intentionality to acts, various kinds of opportunism, and a type of fatalistic retrospective assent to whatever unfolds in life's course.

In recent times perhaps the premier example of ignorance and uncertainty being used to justify and legitimize high-level policy change in Western countries is the precautionary principle. ⁶³ The precautionary principle essentially stipulates that the burden of proof must not be placed on the environment to show harm in decisions about whether to moderate or halt potentially environmentally damaging activities. Different kinds of ignorance play distinctive roles in both debates and legitimation regarding this principle. For example, Dovers, Norton, and Handmer emphasize the relevance of elements in my typology of ignorance, especially forms such as taboo, distortion, and irrelevance, all of which are prevalent features of sustainability debates. ⁶⁴

CAN AGNOTOLOGY BE INTERDISCIPLINARY?

In this chapter I have attempted a survey of several problems that face any would-be social theory of ignorance. Ignorance is inherently a multidisciplinary topic. But to what extent can it become interdisciplinary? What are the prospects for collaboration and integration across disciplines and domains on this difficult, multifarious, important topic?

At first glance, the prospects seem quite daunting. The problems with nomenclature, "blind spots" and "negative bias" are bad enough, but some relevant disciplines pay only limited attention to ignorance or rule it out altogether (for example, some areas in law, engineering, or medicine). Nonetheless, plenty of examples exist of fruitful interdisciplinary collaboration on difficult topics. The key to this collaboration seems to be negotiating a working consensus about the basic nature of the field of inquiry. As Wagner and Berger expressed it, any topic regarded as a "field" in the social sciences usually contains a core of "orienting strategies" that incorporate widely agreed-on core concerns, goals, metatheoretical concepts and presuppositions, research standards, and methodological prescriptions. 65 The usual price to be paid by participants in multi- or interdisciplinary fields of inquiry is, as Foddy and I observed about the study of social dilemmas, that such agreements are looser, less stable, and continually debated and reassessed. 66 In a new area such as agnotology, this kind of contestability would have to be a sign of good health.

The topics covered in this chapter indicate several candidates for "orienting strategies" and "core concerns" in agnotology. A primary orienting strategy suggested here (and elsewhere) is, broadly speaking, a constructivist

approach to understanding how people conceptualize ignorance, communicate about it, cope with it, and utilize it. A second strategic possibility is reflexivity, again in a broad sense of the term. All research domains have orientations, practices, norms, and methods for dealing with ignorance in the process of inquiry. A third strategy is participatory inclusiveness, that is, an exchange of views and understandings of how each discipline construes those issues. I will end this chapter by mentioning three core concerns that could be added to the mix: privileged viewpoints, prescriptive frameworks, and dilemmas.

A problem shared by nearly all attempts to theorize about ignorance is privileging some viewpoints above others. "Privileging" is a crude term but it will have to do for the time being. Simplistic solutions such as thoroughgoing relativism hold too many pitfalls and limitations to be viable. The problem is important because it dramatically affects the nature of the questions that can be addressed in studying ignorance. Most disciplines privilege the viewpoints of the researcher, theorist, or critic in various ways. There is nothing necessarily misguided or wrong in doing this, but the issue does need to be systematically assessed and debated.

The study of ignorance almost inevitably confronts us with prescriptive questions, that is, how people "should" deal with ignorance. As has already been the case in debates about rationality, it is very likely that cross-disciplinary debates about the study of ignorance will also encompass debates about prescriptions for dealing with it. Nor should the consideration of prescriptions be limited to the "rational." They should encompass moral philosophy as well. When is ignorance "virtuous" and why?

The roles played by knowledge and ignorance are not merely mirror images of one another. In fact, the interplay between knowledge and ignorance involves as yet largely unexplored trade-offs and dilemmas. In earlier work, I have presented several examples of both. In "Collingridge's Dilemma," the less well-entrenched a system is and the shorter the time it has been operating, the more easily and inexpensively it can be changed; but the greater is our ignorance of its likely effects or problems.⁶⁷ By the time ignorance of those effects has been reduced, it is too expensive and difficult to change the system. In this trade-off, time is both knowledge and money.

"Mattera's Dilemma" is an example of a conundrum in social regulation that has both trade-off and dilemmatic components. The trade-off arises from the fact that a climate favoring creativity and entrepreneurship requires the toleration of ignorance in the service of freedom. Insistence on full knowledge and control eliminates the latitude needed for creativity. The dilemmatic component arises from the fact that the greater the attempts to regulate behavior, the more reactive people become and the more they attempt to generate ignorance in the would-be controllers by withholding information or giving false information. If both parties pursue their self-interests, then the end result is a system of constraints and controls built on disinformation.

My book on ignorance and uncertainty concluded with a plea for interdisciplinary, boundary-spanning work on ignorance.⁶⁹ In the years since then, real progress does seem to have been made along these lines, even if falling far short of forming a coherent field of inquiry. Nevertheless, that progress leaves little doubt that many disciplines can benefit from one another in studying ignorance, as long as specialists attempt to understand other disciplines' viewpoints with a certain amount of Quine-like charity. Perhaps that is where we must leave the matter for now.

NOTES

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