

Chapter 7

Knowing and Not Knowing

Nico Stehr

The outstanding feature of a man's life in the modern world is his conviction that his life-world as a whole is neither fully understood by himself nor fully understandable to any of his fellow-men. Alfred Schütz (1946, p. 463)

In the presence of the total reality upon which our conduct is founded, our knowledge is characterized by peculiar limitations and aberrations. Georg Simmel (1906, p. 444)

As aptly as these introductory words by Schütz and Simmel summarize my own hypothesis on the presumed phenomenon of non-knowledge,¹ I note that it is captured still more precisely by economist Joseph Stiglitz's (2005) formulation about the "invisible hand" (p. 133) ostensibly operating in the market place. Asked why the invisible hand is invisible, Stiglitz gave a straightforward answer: because it does not exist. Similarly, I ask in this chapter why non-knowledge is difficult to grasp. And my equally analogous response is: because there is no such thing as non-knowledge.

Not wishing to capitulate already at this early point, I concentrate in this chapter on scientific discourses in which participants maintain that something like non-knowledge does exist. The knowledge/non-knowledge dichotomy appears in many discussions on the subject as a kind of performative speech act (Sartori, 1968). However, it recommends only one side of that which it designates, namely, knowledge. I cannot quite sustain my doubt about the existence of not-knowing; from time to time I have to deviate from it and maintain that non-knowledge does exist. At the same time, I draw attention to other terms that are empirically and theoretically more productive than the naked assertion that non-knowledge exists. Finally, I will point to a number of intriguing, but rarely studied topics relating to the question of the societal function or societal treatment of apparently insufficient knowledge.

¹My usage of the term *non-knowledge* follows the convention in the literature that discusses the absence of knowledge. The term is synonymous with *not knowing* and has a close affinity but not identity with *ignorance*. In German the term is *Nichtwissen*.

N. Stehr (✉)

Karl Mannheim Professor for Cultural Studies, Zeppelin University,
D-88045 Friedrichshafen, Germany
e-mail: nico.stehr@t-online.de

Freud and Hayek: Why Quit?

The treatment of non-knowledge by Sigmund Freud and Friedrich von Hayek is of particular interest in this context because their approach is, if I am not mistaken, quite representative for much of scientific discourse. Both Freud and Hayek recognized that there can be no such thing as a researchable subject called non-knowledge, but, unimpressed by their own conclusion, they continued to examine something that does not exist. Their grappling with this issue gives me the opportunity to ask why concerning oneself with the subject of non-knowledge is typical especially for the German-speaking scientific community. Is it a sort of eccentricity?

Freud's (1924/1963) theory of the dream as a psychic phenomenon is based on the primary conviction that the dreamer himself should "say what his dream means" (p. 100). But an evident fundamental obstacle to doing so is that the dreamer is, as a rule, firmly convinced that he does not know what his dream means. As Freud notes, "the dreamer always says he knows nothing" (p. 101). The lack of information from the dreamer confronts Freud with an apparent scientific and methodological conundrum defying sound interpretation of dreams. "Since he [the dreamer] knows nothing and we [the psychoanalyst] know nothing and a third person could know even less, there seems to be no prospect of finding out [the dream's meaning]" (p. 101).

Instead of accepting these findings as a sound conclusion and therefore forsaking any further search for the meaning of dreams, Freud (1924/1963) considered another possibility: "For I can assure you that it is quite possible, and highly probable indeed, that the dreamer *does* know what his dream means: *only he does not know that he knows it and for that reason thinks he does not know it*" (p. 101). This interpretation seems to be confusing and self-contradictory. Freud even asked himself whether a contradiction in terms might exist in his hypothesis that there are "mental things in a man which he knows without knowing that he knows them" (p. 101):

Where, then, in what field, can it be that proof has been found that there is a knowledge of which the person concerned nevertheless knows nothing, as we are proposing to assume of dreamers? After all, this would be a strange, surprising fact and one which would alter our view of mental life and which would have no need to hide itself: a fact, incidentally, which cancels itself in its very naming and which nevertheless claims to be something real—a contradiction in terms. (pp. 102–103)

For Freud what followed from these observations was the conclusion that one ought to abandon this method of dream interpretation as lacking any substance. But Freud did not. After all, the knowledge does not really hide from the observer. One has only to search for it persistently. "It is very probable, then, that the dreamer knows about his dream; the only question is how to make it possible for him to discover his knowledge and communicate it to us" (p. 104).

Hayek, confronted with a similar dilemma, decided, just like Freud, to ignore it. In his essay entitled "The Creative Powers of a Free Civilization" (1960/1978), in which the lack of knowledge is a question of the distribution of knowledge in markets, Hayek first noted that any progress in civilization is the result of an increase of knowledge. In the real world, according to Hayek (1960/1978), it simultaneously holds true that "the individual benefits from more knowledge than he is aware of"

(p. 22), and he added that “this fundamental fact of man’s unavoidable ignorance of much on which the working of civilization rests has received little attention” (p. 22) in science.² Human knowledge is far from being complete.

The key passage in Hayek’s (1960/1978) analysis of the difference between what he called the “boundaries of ignorance” (p. 22) or man’s “unavoidable ignorance” (p. 22) and “conscious knowledge” (p. 24) is: “It must be admitted, however, that our ignorance is a peculiarly difficult subject to discuss....We certainly cannot discuss something intelligently about which we know nothing” (p. 23). Hayek takes recourse to a kind of Münchhausen maneuver: “We must at least be able to state the questions even if we do not know the answers....Though we cannot see in the dark, we must be able to trace the limits of the dark areas” (p. 23). Nevertheless, as Hayek emphasizes, “If we are to understand how society works, we must attempt to define the general nature and range of our ignorance concerning it” (p. 23).

The Excess Boom in Non-knowledge

Despite of the problems that Freud and Hayek quite obviously had with the concept of non-knowledge, why has the term resonated so much in the contemporary cultural and social sciences, particularly in German-speaking countries? In the media and public discourse alike, the category of non-knowledge is increasingly becoming a prominent and trenchant monetary unit as the shady side of knowledge, but why is it gaining currency?

The boom in reflection on non-knowledge certainly has to do with the essentially controversial concept of knowledge as well as with the common understanding of the modern conditions for the production of knowledge, with the societal role often attributed to knowledge, and with the theory of modern society as a knowledge society. Is the difference between knowledge and non-knowledge an example of the typically static conceptual polarity of Old European philosophy? Or is that difference basically only the widespread cultural criticism that the individual—given the extensive and growing volume of objectified knowledge in modern societies and given the sophisticated new technical and complicated methods of accessing it—disposes over only a minute (and probably diminishing) share of all knowledge? Are the widely discussed findings on the average voter’s alleged political ignorance, stupidity, and disenfranchisement and on the danger it poses to democracy a cause of the topicality of the subject of non-knowledge?

Is it, on the other hand, unrealistic to assume that the average citizen, including the well-educated contemporary citizen, has (or should have) sufficient *technical* expertise to intervene, for example, in the complex decision-making on economic questions of the goal conflict between inflation and unemployment? At root, does the concept of non-knowledge merely mean the societally necessary *distribution* of

²The German wording that Hayek chose as translations of two central concepts in his English original is of interest, and is, in my opinion, fully adequate. “The boundaries of his ignorance” and “man’s unavoidable ignorance” are rendered as *Grenzen seines Unwissen* and *unvermeidlichen Unkenntnis des Menschen* (Hayek, 1960/2005, p. 31). In other words, there is no reference to non-knowledge (*Nichtwissen*).

knowledge? Does the concept of non-knowledge perhaps refer primarily to the future present, about which one is really little informed? Does the origin of the boom in observations about non-knowledge lie, under certain circumstances, in an overestimation of the societal role of allegedly unquestioned scientific knowledge and in an underestimation of the societal roles of knowledge?

In my view the societal phenomena perceived as non-knowledge can be better captured by other terms, such as “systemic ignorance” (Moore & Tumin, 1949, p. 789), that express how a lack of knowledge or information is manifested in modern societies and how people can deal with knowledge gaps. In any case, two keys to recognizing the myth of non-knowledge are the concept of knowledge itself and the complicated question of distinguishing between information and knowledge.

Knowledge as a Societal Construct

The discussion on the concept of non-knowledge often reflects a liberal intermingling of the terms *knowledge* and *information*. I assume that one should distinguish between the two, even if this differentiation is difficult to maintain in practice. A lack of information is not non-knowledge.³ Just exactly what knowledge is and how knowledge differs from information, human capital, or other intellectual or cognitive characteristics is an essentially controversial question. Neither the concept of knowledge nor the manner of knowledge’s production, distribution, use, or consequences can be taken for granted. They constitute foregone conclusions, at least for the scientific observer.

I would like to define knowledge as the capacity for societal action (the capacity to act), as the possibility to get something going. Knowledge therefore refers to process knowledge. Knowledge is a model for reality. Shannon (1948/1949), for example, explained how words and images can be converted into characters and transmitted electronically. He thus contributed to realizing the Digital Revolution.⁴ According to Shannon, the expansion of knowledge represents a broadening of the horizon of possibilities. Whether the broadening of the possibilities for action also automatically represents an increase in the possibilities for disappointment (often also understood to be an increase in non-knowledge) has to be regarded as controversial. Insufficient knowledge on the part of an individual or a group accordingly means the inability of those actors to mobilize knowledge in order to put something in motion.

³For instance, Wehling (2009, p. 99) characterizes the insufficient information “Does the guest arrive at 5 or 6 p.m.?” as a case of non-knowledge. This example is at best vague information, as I show more precisely in this chapter.

⁴Dyson (2011) described Shannon’s case: “In 1945 Shannon wrote a paper, A Mathematical Theory of Cryptography, which was stamped SECRET and never saw the light of day. He published in 1948 an expurgated version of the 1945 paper with the title ‘A Mathematical Theory of Communication’. The 1948 version appeared in the *Bell System Technical Journal*, the house journal of the Bell Telephone Laboratories, and became an instant classic. It is the founding document for the modern science of information. After Shannon, the technology of information raced ahead, with electronic computers, digital cameras, the Internet, and the World Wide Web” (par. 13).

Knowledge exercises an active function in the societal sequence of actions only when action is not carried out in essentially stereotyped habitual (effortless) patterns or is otherwise largely regulated, that is, where there is leeway and the need for decisions and where this situation necessitates mental exertion.^{5,6} The societal practices in which decisions are possible and necessary represent the ecology of knowledge or, more exactly, of its application.

Every implementation of knowledge, not only of great scientific experiments, requires control of the circumstances of action (the initial conditions) through active agents, who, for example, want to translate laboratory successes (or a thought experiment) into practice. In other words, when “scientific knowledge is to be ‘applied’ in society, adaptation to the initial conditions prevailing there has to be made, or societal practice has to be remodeled according to the standards set by science” (Krohn & Weyer, 1989, p. 354).⁷

Information and Knowledge

I define information in distinction to the concept of knowledge as follows: The content of information concerns the characteristics of products or results (output, condition, supply), whereas the stuff that science consists of refers primarily to the qualities of processes or resources (input, procedures, business enterprises), which are used in processes. Knowledge is the capacity to act, whereas information does not enable one to set anything in motion.

It is just as important to emphasize from the outset that information and knowledge have, to a limited extent, common attributes. The most important basic common denominator is that neither information nor knowledge can be understood independent of societal contexts. In daily life, as in the scientific discourse, the conceptual interchangeability of information and knowledge is extensive. It is nonetheless notable that public places such as airports, shopping centers, railroad stations, and highway roadhouses commonly do not have a knowledge stand but rather

⁵ A variant of these thoughts worth considering—one quoted by Hayek (1960/1978, p. 22)—can be found in Whitehead’s (1911) *Introduction to Mathematics*: “Civilization advances by increasing the number of important operations which we can perform without thinking about them. Operations of thought are like cavalry charges in a battle—they are strictly limited in number, they require fresh horses, and must only be made at decisive moments” (p. 61).

⁶ Luhmann’s (1992) observations about the preconditions for the possibility of making a decision may permit a still broader application of knowledge. “One can only decide,” as he very plausibly underlines, “when and to which extent it is not certain what will happen” (p. 136). On the premise that the future is highly uncertain, the lack of knowledge in decision-making processes can extend over many other societal contexts, too, and thereby also to those that are normally characterized by routines and habitual behavior.

⁷ Hans Radder (1986) arrived at a similar conclusion when he pointed out that material as well as social prerequisites ultimately have to be met for long-term practical success in technical production: “The creation and maintenance of particular social conditions (for example, a bureaucratic and centralist administration in the case of nuclear energy) is necessary in order to be able to guarantee the permanent technological success of a project” (p. 675).

an information stand. The blending of these terms will probably continue to prevail in practice, in science and everyday life alike, because who can distinguish between the information society and the knowledge society?

Observing Non-knowledge, and Some of the Questions I Ask Myself in the Process

With these observations in mind, I try to ascertain what could or could not be meant when one speaks of non-knowledge. People's actions are guided by knowledge. Knowledge of others and self-knowledge are prerequisites for socialization. Hence, as Simmel (1906) noted, knowledge is an anthropological constant: "All relationships of people to each other rest, as a matter of course, upon the precondition that they know something about each other" (p. 441). There can be no societal actors without knowledge. One is just as far from being unknowing *without* knowledge as one is naked without a headscarf. A society without secrets is inconceivable. Ignoring knowledge and information is sensible, even rational. A society in which there is total transparency is impossible. Knowledge is never created out of nothing. Knowledge, or the revision of knowledge, arises out of already existing knowledge (not out of forms of non-knowledge). The existence of a *non-knowledge* society is just as questionable as that of a human society without language. Humans live in a complex society marked by a high degree of functional differentiation in which almost all of its members are non-knowledgeable about almost all knowledge. Knowledge in the broad sense meant in this chapter is not restricted to any particular social system in modern societies. Thus, knowledge is everywhere (Luhmann, 1990, p. 147).

It is useful to ignore information and knowledge. Each individual knows that his or her knowledge is limited. Yet people profit a great deal from knowledge they are not acquainted with. What indicators could be used to characterize a non-knowledge society empirically? Almost half of the American population is convinced that the Earth is younger than 10,000 years old. Is the American society for that reason a non-knowledge society?

Who or what is the standard of comparison when one speaks of the duality of non-knowledge and knowledge or of the relationship of knowledge to non-knowledge (as *known unknowns*)? Is it the individual or rather a collective? Privileging the individual is common. To put it more stringently, does the concept of non-knowledge mean a single process, a single quality (information), or the prognosis of an occurrence? How long must (or can) non-knowledge be perceptibly recognizable in order to be non-knowledge? Can cluelessness, for example, last only for seconds? Does one refer to individual forms of knowledge (or information) that the isolated individual (e.g., a scientist) or a non-knowledgeable collective does not—and cannot—have because one always proceeds selectively or is forced to filter?

Knowledge, by contrast, is a variable societal phenomenon that lies on an indivisible continuum and points to the existence of the elementary distribution of knowledge in complex societies. No clear-cut difference between knowledge and non-knowledge exists. Knowledge is a total societal phenomenon.

There is no comprehensive knowledge; nobody can know everything. Acting under conditions of uncertainty is commonplace. Knowledge of these gaps is knowledge. But knowledge of gaps does not belong in the category of non-knowledge if it is a case of negative knowledge (to the extent that one finds this designation helpful). Actually, one can often close this gap quickly because it is possible to know or find out who might know it (a task fulfilled by the role of experts, for instance). On the other hand, there are things that everyone, or almost everyone, knows or about which almost everyone is informed (e.g., the fact that almost every human has two eyes or that there is such a thing as weather or climate). There are a number of expressions that are both empirically and practically more productive than *non-knowledge* and nonetheless illuminate the horizon of problems that non-knowledge allegedly comprises. In the following section I limit myself to just one of these possibilities.

Asymmetric Information/Knowledge

In an influential article entitled “The Market for Lemons,” the economist and later Nobel Laureate George Akerlof (1970) paved the way to a systematic analysis of asymmetric information by conducting an exemplary analysis of the respective information that buyers and sellers of used cars had. An asymmetric state of information is one of the fundamental characteristics of various classes of participants in the used-car market. As a rule, the owner and the driver of the used car on sale have much more detailed knowledge about the dependability and history of the vehicle’s mechanical problems than the potential purchaser does. In a credit agreement the debtor is guided by certain intentions to repay the credit or not. The lender usually has no access to that information. Nor can the lender be certain that the debtor’s intended investment will actually be profitable. Generally speaking, asymmetric information on the part of market participants should lead to market failure.

Buyers and sellers, lenders and debtors are often conscious of the fact that there is or can be a state of asymmetric information. It follows that the buyer or lender seek indicators that diminish the mistrust in the available information or allow that information to be considered more or less reliable. Because the transaction costs of the acquisition of relevant information might be high, the very accessibility of the information on the seller’s or debtor’s social reputation will likely be an important indicator for the lender or buyer.

From Akerlof’s deliberations and those of other economists (e.g., Chappori & Salanie, 2000; Sharpe, 1990; Wang, 2012), I derive the following general lesson for my analysis of the antithesis of information and knowledge: Because societal knowledge is scattered asymmetrically rather than evenly distributed, one has to assume a cognitive-societal functional differentiation in all societal institutions.⁸

⁸In memory research an extreme example of asymmetric information has recently come under study—the few people who have “superior autobiographical memory” (Parker, Cahill, & McGaugh, 2006, p. 36), that is, the ability to recall every single day of their lives or to remember the occurrences of every single day.

In science such a cognitive division is not only perceived as a matter of course but is also generally understood to be a functional characteristic of science as an institution. Not every scientist can work on just any question. And the role of every scientist cannot be classified in relation to itself, but only in relation to that of other scientists. It is therefore natural to speak of a cognitive functional differentiation in all societal institutions. In other words, it can make sense only to speak of a range of knowledge in groups of actors in comparison to symmetrically limited knowledge in other groups of actors, and not of knowledge and non-knowledge.

On the Virtues (Advantages?) of Non-knowledge

The functional meaning of non-knowledge differs from one societal institution to the next. In an institution such as science it is a state of development of knowledge that must be overcome, a condition that acts as an incentive. In a highly stratified societal institution (e.g., a total institution) differing states of knowledge are a constitutive characteristic feature (a functional necessity) that is defended by all means. A society in which complete transparency prevails would be, as Merton (1949/1968) emphasized, “diabolical” (p. 345). In practice, a mutually transparent, complex society is unrealistic.

Moore and Tulmin (1949, p. 787), in their classical functionalist analysis of the societal functions of ignorance, therefore pointed to what in their opinion is the widespread opinion that ignorance is the natural enemy of societal stability and of the possibility for orderly societal progress and that every increase in knowledge automatically increases human welfare. A generally positive public attitude toward new knowledge, which was widespread in the years immediately following World War II, is at present losing ground to growing skepticism about new scientific and technical knowledge. It is not unusual anymore to encounter the opinion that people know too much. Explicit knowledge politics, that is, efforts to police novel knowledge, commences once new capacities for action have been discovered (Stehr, 2003).

There is a multitude of convincing references to the virtues and advantages of ignorance, a lack of knowledge, and invisibility. The discussion and formulation of the novel moral principle for an individual’s “right to ignorance” by Jonas (1974, pp. 161–163) is clearly germane to a discussion of the political and ethical dilemmas generated by the dynamics with which knowledge grows. Jonas’s moral principle is opposed by equally formidable ethical demands that insist on a right to know, especially at the collective level or from a macroperspective (Sen, 1981; Stiglitz, 1999). In everyday life, sentiments that support the virtue of not knowing find expression in such sayings as “What I don’t know can’t hurt me” and “Where ignorance is bliss, it is folly to be wise.”

Opposition to excessive transparency of one’s own behavior and that of other actors, as Merton (1949/1968, p. 343) also emphasized, stems from certain structural characteristics of societal groups. To these features belong, for instance, the

institutionally sanctioned, but in reality also limited, negligence in complying with or enforcing existing social norms. The characteristics also include psychologically determined, variable opposition to maximum behavioral transparency (Popitz, 1968, p. 8).⁹ In modern society technical and legal barriers and these conditions for opposition preclude an unlimited investigation of the behavior and convictions of individual actors—about whom one would like to know everything. The alleged goodwill or maliciousness of the thought police is irrelevant. For instance, new possibilities for avoiding technically mobilized monitoring keep turning up.

Popitz (1968), on the other hand, pointed to the *disencumbering* function that limited behavioral information has for the system of sanctions.¹⁰ Limiting the available or requested behavioral information—a decision that is tantamount to relinquishing sanctions—is also a sort of “indeterminacy principle of social life” (p. 12). It “opens a sphere in which the system of norms and sanctions need not be taken literally without obviously giving up its claim to validity” (p. 12).

Lastly, there is a further (primarily cognitive) function of insufficient knowledge. It has repeatedly been claimed that knowledge arises from non-knowledge, or that non-knowledge can be transformed into knowledge. Just how this transformation is supposed to happen is scarcely addressed, however. The hypothesis that knowledge originates in non-knowledge as it were, in nothing (*ex nihilo*), completely overlooks the societal genealogy of knowledge, such as the close, even intimate relationship between scientific and practical knowledge. The birth of a scientific discipline is no parthenogenesis. The hypothesis of the transformation of non-knowledge into knowledge favors certain knowledge in that the origin of new knowledge is simply suppressed.

The Societal-Cognitive Functional Differentiation Between Non-knowledge and Societally Determined Knowledge Gaps

One of the self-evident realities in a modern society, with its functionally differentiated cognitive structure, is that individuals, societal groups, and societal institutions have long since given up as an illusion the wish, or the hope, for their knowledge to be self-sufficient. Limited knowledge alleviates. Knowledge is unequally

⁹Inasmuch as the disregard and sanctioning of existing social norms by certain incumbents of societal positions of a group is known, it must be decided whether “the basic formal structure of a group is being undermined by the observed deviations of behavior. It is in this sense that authorities can have *excessive knowledge* of what is actually going on, so that this becomes dysfunctional for the system of social control” (Merton, 1949/1968, p. 343; emphasis added).

¹⁰In this respect I note that the expression *non-knowledge* (*Nichtwissen*) in the title of Popitz’s treatise does not appear a single time in the text. The work’s title may be the work of the publishing house. The exposition shows that Popitz rightly avoided the term *non-knowledge* and more guardedly wrote of limited behavioral information and limited behavioral transparency.

distributed. As a rule, managers do not themselves have the technical knowledge of their employed laborers, engineers, or assembly-line workers.¹¹ Despite this lack of knowledge, managers still become managers.

Knowledge gaps or incomprehensive forms of knowledge distribution, *not* non-knowledge, are a constitutive element of functionally differentiated societies. Asymmetrical stocks of knowledge do not lead to society's collapse. A society's ability to act competently is not a function of the knowledge and information of isolated individual actors. A competent actor, for instance, as a politically active citizen, need not be comprehensively informed as an individual.

A society without this fundamental limitation, without this cognitive functional differentiation, is inconceivable. No one has to know everything. But this elementary fact, which determines the way society is, does not justify the conclusion that that non-knowledge is the opposite of knowledge. A being constantly caught up in non-knowledge cannot exist. The more collective knowledge increases,

the smaller the share of all that knowledge becomes that any *one* mind can absorb. The more civilized we become, the more relatively ignorant must each individual be of the facts on which the working of his civilization depends. The very division of knowledge increases the necessary ignorance of the individual and most of this knowledge. (Hayek, 1960/1978, p. 26, emphasis added)

Abandoning the hope for autarkic knowledge, especially the *individual* self-sufficiency of knowledge, and giving up the conviction that knowledge is fundamentally limited (bounded) entails both costs and benefits. But the loss of autarky—inasmuch as autarky had ever existed, even in traditional societies—is never to be understood as a form of non-knowledge. Societal innovations such as the market and the scientific or political system help manage knowledge gaps (Pérez, Florin, & Whitelock, 2012).

Relevant functionally differentiated scales of knowledge differ according to facets such as their respective epoch, the type of society, the pattern of societal inequality, and the interests of the dominant worldview.¹² In modern complex societies the scale of knowledge is longer than in traditional societies. The distance to the sources of knowledge is often great. Personal acquaintance with the knowledge producer is not necessary. Only in exceptional cases does the knowledge that one does not have, but can obtain, include the knowledge that was necessary for the production, legitimation, and distribution of the knowledge acquired.

¹¹ Collinson's (1994) examination of labor resistance—based on two case studies—drew on the emphasis that Clegg (1989) placed on knowledge and information of subordinates and outlines generally “the importance of different forms of knowledge in the articulation of resistance” (p. 25). Collinson summarized his findings and pointed out that “specific forms of knowledge are a crucial resource and means through which resistance can be mobilized. Knowledge in organizations is multiple, contested and shifting. Employees may not possess detailed underpinnings of certain bureaucratic/political processes, but they often do monopolize other technical, production-related knowledges that facilitate their oppositional practices” (p. 28).

¹² The concept of the scales of knowledge has a parallel in the concept of the degrees of property rights, which are calibrated according to the labor, need, or performance, that is, the merits, of the owner (Neumann, 2009).

Outlook

The current intense debate among social scientists, with its radical polarization of knowledge and non-knowledge, is like an echo from a lost world or the wish to be able to live in this lost, but secure, world. It was a world in which knowledge was reliable, objective, ontologically well-founded, truthful, realistic, uniform, and undisputed. It was a world in which scientific knowledge was unique and the profane world of nonscientific knowledge was largely disqualified. It was a world in which more knowledge alone—such as that which enables one to act successfully in practice—was always superior to having no additional knowledge (knowledge bias). The world of unquestioned knowledge has vanished. Unclear is whether the disappearance of such knowledge is a real loss, as one is evidently supposed to believe from talk of the divide between non-knowledge and knowledge, or whether it is a form of intellectual emancipation.

The difference between knowledge and non-knowledge is an old European antithesis with an ancestry harking back to premodern cultures. The old European tradition of a dichotomy of non-knowledge and knowledge becomes apparent especially in the attribution of persons or groups to one of these two categories. Such ascription holds that the unknowing person or, more generally, the unknowing social class is not only helplessly exposed to the power of knowledge but also pitiable and backward. And inasmuch as the occurrence of non-knowledge applies to other societies and cultures, it is foreign knowledge—not one's own—that is non-knowledge. As described by Fleck (1935/1979): “Whatever is known has always seemed systematic, proven, applicable, and evident to the knower. Every alien system of knowledge has likewise seemed contradictory, unproven, inapplicable, fanciful, or mystical” (p. 22).

For that reason these traditional deliberations on the great divide between knowledge and non-knowledge come nowhere close to resolving the dilemma described by Luhmann (1991): “Is the generally held assumption that more communication, more reflection, more knowledge, more learning, more participation—that more of all of this would bring about something good or, in any sense, nothing bad—at all justified?” (p. 90, my translation). The emerging political field of knowledge politics is dedicated to this societal dilemma posed by the risks of knowledge (Stehr, 2003).

One should not insist on an absolute antithesis of knowledge and non-knowledge—there is only less or more knowledge and those who know something and those who know something else. The practical problem is always to know how much or how little one knows in a given situation. A person is not either knowledgeable or unknowing. A person has more knowledge in one context than in another: A person may know a great deal about tax regulations but hardly anything about playing golf.

Actors (including scientists) react to complex societal forms by simplifying mental constructs of these relationships. The mental constructs are, in fact, incomplete inasmuch as they do not depict reality in its full complexity. These simple models

change, react to the unexpected, but are hardly non-knowledge. One of the advantages of liberal democracies is the consciousness that omniscience can be dangerous and that safeguarding privacy must remain a form of sanctioned ignorance.

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