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What is Epistemological Violence in the Empirical Social Sciences?

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Abstract

This article discusses the meaning of *epistemological violence* in the empirical social sciences. It is argued that the concept is closer to personal than to structural violence in that it has a subject, an object, and an action, even if the violence is indirect and nonphysical: the subject of violence is the researcher, the object is the *Other*, and the action is the interpretation of data that is presented as knowledge. Using a hypothetical example, the problem of interpretation in empirical research on the *Other* is discussed. Epistemological violence refers to the interpretation of social-scientific data on the *Other* and is produced when empirical data are *interpreted* as showing the inferiority of or problematizes the *Other*, even when data allow for equally viable alternative interpretations. Interpretations of inferiority or problematizations are understood as actions that have a negative impact on the *Other*. Because the interpretations of data emerge from an academic context and thus are presented as knowledge, they are defined as *epistemologically violent* actions. Problems, consequences, and practices surrounding this concept are discussed.

Introduction

Forty-one years ago, Galtung (1969) encouraged the conceptualization of 'theoretically significant dimensions of violence that can lead thinking, research, and potentially, action, toward the most important problems' (p. 168). Following this maxim, he developed the now famous distinction between personal and *structural violence*, arguing convincingly that structures such as social injustice can be understood as violence. The term *epistemological violence* (EV) that I discuss here is, however, closer to personal violence in that it has a subject, an object, and an action, even if the violence is indirect and nonphysical. I argue that in the empirical social sciences, the subject of violence is the researcher, the object is the *Other*, and the action is the interpretation of data that is presented as knowledge.

A Hypothetical Example

Once upon a time, a writer proposed that humanity should be divided into *large-eared* and *small-eared* people. The writer suggested that small-eared people do not listen, have lower musical ability, are deficient in the ability to empathize with others, and much more. Because they lack interpersonal skills, small-eared people are also responsible for cruelty and some of the greatest evils in world history. The government of the time endorsed the writer's ideas and enacted laws that divided children, based on the new concept of *earedness*, into separate kindergartens and schools. As a consequence, the whole of society was divided into large- and small-eared classes, with separate education, health, and legal systems, and with separate housing and recreational spheres for each group.

Later, and at the time when psychology became an independent discipline, researchers began to test hypotheses regarding *earedness* with empirical means. They found that

several of the assumptions regarding *earedness*, although not all, had empirical support. More recently, evolutionary psychologists discussed the adaptive advantage of ear size; clinical psychologists used the concept as a broad diagnostic tool; psychologists of religion found that religious founders had disproportionately larger ears than their contemporaries; historians of psychology estimated the *large-earedness* of psychological pioneers using paintings, photographs, and ear descriptions; and debates as to whether Kant had larger ears than Descartes, or whether Kant's *large-earedness* had been overestimated, took place among personality psychologists.

Yet, some criticism of the concept also emerged: Methodologists argued that *earedness* must be adjusted for by height and gender and that the variable is continuous rather than discontinuous. Other critics argued that *earedness* is a social construct. However, defenders of the concept pointed out that empirical studies confirm the significance of *earedness*, that the variable is an excellent predictor of professional success, and that *earedness* demonstrates high correlations with many other psychological variables. They also pointed out that the average person knows that *earedness* has always existed and that to deny it would contradict common sense.

To put critics to rest, a leading research team of psychologists provided a large-scale study and a meta-analysis of previous *earedness* studies. All results showed that there is a consistent difference between large-eared and small-eared individuals, and twin studies demonstrated that the trait is highly heritable. The psychologists interpreted the results in the following way: 'Because the pattern of differences between large-eared and small-eared groups can be found in numerous studies and in this meta-analysis, we must conclude that the difference is an irrefutable fact. *Earedness* has a biologic correlate that can be measured objectively and reliably, and twin studies show that *earedness* is a highly heritable trait. Because the difference in empathy between small-eared people and large-eared people is inherited, it is reasonable to separate these two groups into different spheres of social life.'

Approaching Epistemological Violence

One could challenge the original theory of *earedness* or the social construction of the concept, assess the motivations of researchers, understand the economic interests involved, or analyze the methodologies that were used – and all these actions would be legitimate. My argument is focused on the interpretation of data and the lack of hermeneutic awareness about what goes into an interpretation. I suggest that interpretations, as most often expressed in the discussion section of empirical articles, are a form of action, and if concrete interpretations have negative consequences for groups – even though alternative, equally plausible interpretations of the data are available – then a form of violence is committed. Because the interpretations are presented as knowledge, or because they emerge from science, they represent EV (see Teo, 2008).

In this particular example, one could make the argument that the study of *earedness* itself is a form of EV. However, as introduced, the concept of EV is limited to the interpretation (discussion) part of an empirical article. This specific limitation on the hermeneutic part of discussion provides a framework for concrete analysis. In the example provided, there are at least two forms of EV in the interpretation part: (i) the interpretation itself is a form of violence, for instance, because the concept of *earedness* is not challenged and (ii) the interpretation is violent because specific policy recommendations are made or accepted (i.e., regarding the separation of the two groups). Traditional psychologists will have fewer problems with the second kind of EV, because it reinforces

the distinction between *facts* and *decisions*. However, the first form of EV might be more contentious among traditional psychologists because it requires an understanding of the historical and theoretical situatedness of a concept such as *earedness*, as well as an acceptance of the idea that empirically validated research itself can have a negative impact on human groups (e.g., the interpretation that one group is by nature less empathic than another group can have a negative impact).

Theoretical Justification of the Concept

The term *epistemic violence* has been used by postcolonial researchers such as Spivak (1988) who applied the concept in a very general sense whenever the *Other* had been constructed. I would like to introduce the concept to the empirical social sciences and identify the very moment in which violence is produced. To do that, we begin with an analysis of the relationship between data and the interpretation (discussion) of data. Of course, one could locate the process earlier when hypotheses are developed and data are collected. Hypotheses can be violent, but such a qualification may depend on the intentions of the researcher whereas the interpretation of data is an action that can be assessed epistemologically and ethically.

The relationship between data and interpretation of data has been the subject of numerous philosophical and psychological studies. The argument was originally developed in the context of the natural sciences: The physicist Pierre-Maurice-Marie Duhem (1861–1916) (1905/1954) suggested that experiments in physics contain observations of phenomena *and* theoretical interpretations that cannot be separated. In North America, the underdetermination of theory by data is often associated with Quine (1969). In psychology, the critical German psychologist Klaus Holzkamp (1964/1981) published a monograph on the problem. He argued that the theoretical interpretation of experimental results is not binding and there exist no criteria in experimental psychology for establishing particular theoretical interpretations as valid. Indeed, the book addresses an issue that has not been solved in the more than four decades since its publication.

Holzkamp (1964/1981) labeled the ambiguous relationship between theory and experiment in psychology as the problem of *representation*, meaning the mode in which experimental propositions are representative (or not) of theoretical propositions. The problem arises because for any given experimental proposition, additional theoretical propositions can be supplemented through *interpretation*, and because each experimental proposition has infinite theoretical meanings. There exists no methodological principle that forces a researcher to interpret any given experimental proposition in a specific way. On the other hand, theoretical propositions allow for a variety of experimental designs so that both elements in this process demonstrate plural meanings.

A set of data may be interpreted in many different ways. Usually data are interpreted within the original framework from which the empirical research was developed. However, this is not a necessity because data do not determine interpretations. If that were the case, psychologists would not need interpretations (discussions of empirical results) and we could end empirical research (quantitative or qualitative) with just the data. However, discussions or interpretations of data are often the most important part of a research article in the sense that they may be summarized in textbooks or conveyed to students, the mass media, and the public.

Interpretations produce *meaning* within a theoretical framework. Empirical psychologists cannot operate without interpretations that are based on an understanding of the meaning of results. One problem arises when these interpretations (i.e., theoretical propositions

derived from the empirical propositions) are presented as facts or knowledge. Yet, *knowledge* that is produced in empirical psychological studies contains empirical results *and* theoretical interpretations. These interpretations are not determined by data and require a hermeneutic process. For example, if one finds differences in IQ between racialized groups, which may be an empirical result, the interpretation that this difference is a result of genetic factors, is a theoretical interpretation that is not determined in any way by data showing empirical difference.

'Knowledge' About the *Other* and a Definition of Epistemological Violence

Yet, if an empirical difference is interpreted as inferiority or problematizes the *Other*, whether this theorizing has epistemological or practical consequences, one should speak of a form of violence that is produced in 'knowledge.' In these cases, interpretations of data (and not data!) turn into *epistemological violence*. Epistemological violence is a practice that is executed in empirical articles and books in psychology, when theoretical interpretations regarding empirical results implicitly or explicitly construct the *Other* as inferior or problematic, despite the fact that alternative interpretations, equally viable based on the data, are available. Interpretations of inferiority, or problematizations (see Teo, 2004), are never determined by empirical results; yet, they have a negative impact on the *Other*. Thus, interpretations are the actions of a subject against an object that one must label as violent.

The *epistemological* part in this concept suggests that these theoretical interpretations are framed as knowledge about the *Other* when in reality they are interpretations regarding data. The term *violence* denotes that this 'knowledge' has a negative impact on the *Other* or that the theoretical interpretations are produced to the detriment of the *Other*. The negative impact can range from misrepresentations and distortions to a neglect of the voices of the *Other*, to propositions of inferiority, and to the recommendations of adverse practices or infringements concerning the *Other*. The term *epistemological violence* as it is used in the argument does not refer to the misuse of research in general but is specific to theoretical interpretations of empirical results that have negative connotations for the *Other* in a given community.

The idea that Black individuals are intellectually inferior by nature (see Rushton, 1995) when expressed in an academic article has consequences for the Black reader or for non-Black readers who might construct the Black person as intellectually inferior, which might change their behavior or attitudes. A close look at this type of research shows that the theory (Blacks are intellectually inferior by nature) has never been tested directly but that empirical findings of difference are interpreted that way. I submit that such a theoretical proposition is violent in that it leads to harm. It should also be mentioned from the history of race studies that policies were changed because of the theoretical interpretations of researchers and psychologists (e.g., see Gould, 1996, on the US *Immigration Restriction Act*). Because the harm is accomplished by researchers and is epistemological in nature, I use the term *epistemological violence*. This violence and damage is done under the authority of social science and knowledge.

Epistemological-Ethical Aspects of the Concept

The concept of epistemological violence is descriptive although it has clearly ethical connotations. The concept is not about political correctness but about scientific correctness. It is relatively easy to train individuals to identify epistemological violence in an article: they need to look at the problem of *representation* (do the empirical propositions

allow one to test the theoretical propositions and do the theoretical propositions represent the empirical data?), the problem of *underdetermination* (do the empirical results determine the theoretical interpretations or are there are equally viable alternative theoretical interpretations?), and at the question of whether the *Other* is constructed as inferior or as problematic.

At this point, it should be mentioned that progressive interpretations of differences regarding the *Other* may also be underdetermined by data. However, if the theoretical propositions do not construct the *Other* as inferior or problematic, then these theoretical propositions are not epistemologically violent. For example, to interpret the empirical difference, namely the underrepresentation of women faculty at elite universities in the United States, as indicating that women are less intelligent than men, is an epistemologically violent interpretation of empirical data. To interpret the same difference of the same empirical study as indicating that women are oppressed at elite universities also should be identified as a problem of underdetermination and representation, but such a proposition would not be epistemologically violent to women.

Because interpretations are actions, we can evaluate the concrete consequences of interpretations (see also Austin, 1975). If interpretations are beneficial to the *Other*, then they may still be underdetermined by the data, but they may not lead to harm. On the other hand, some actions have harmful consequences for *the Other*. In such cases, communities of the negatively constructed *Other* should be the source for establishing the criteria for harm. There exists collective violence (wars), individual violence (one person against another), and violence executed by scientists (epistemological violence). EV is likely to be asymmetrical: EV executed by scientists cannot be countered by public rejection because the name of science has a higher status than theoretical criticism expressed by a marginalized *Other*.

At this point in reflection, one could raise the question of whether a theoretical interpretation that is epistemologically violent should also be considered a *hate crime*. Is epistemological violence the equivalent of an academic hate crime? I have suggested that the concept of EV is intended as descriptive rather than legal. If it were a legal matter, then, at least in parts of North America, one would have to begin with the distinction between a hate crime and hate speech. A hate crime involves a criminal act, whereas in hate speech, the speech itself is punished (see Gerstenfeld, 2004). Although the law distinguishes between a conduct and an expression, this distinction is not completely clear from a philosophical (and a legal) perspective because expressing propositions in writing or through a presentation is a form of action. Still, I would emphasize that a theoretical interpretation of empirical results, as epistemologically violent as it may be, should not have the same legal status as lynching. If interpretations contain calls for action (e.g., Siemens, 1937, asking for the sterilization of the feeble-minded), then they may reach the same level, but such an assessment can often only be established a posteriori (in hindsight). I prefer to have this discussion developed in the social-scientific domain by pointing out the relationship between empirical research and theoretical propositions of interpretation, by discussing the history and its consequences for the construction of the *Other*, and by identifying epistemological violence committed by academics against the *Other*.

Contexts of Reflection

Theoretical propositions about the *Other* are very powerful in psychology because they appear to be based on empirical studies. The past successes and to a certain degree the current shaping of discourse on the *Other* can be attributed to psychologists' accepted

usage of mainstream empirical methods that are applied, for example, to the comparison of various racialized groups. Social, historical, philosophical, and political challenges to this type of research are quickly dismissed by the argument that critics do not use statistical testing. An analysis of the context of discovery is seen as irrelevant to the actual results of experimental and empirical studies. Thus, I suggest that empirical research on the *Other* requires a three-pronged challenge:

(i) An *analysis of the context of discovery*: this approach is focused on why researchers are interested in studying the *Other*. Critical reconstructions might look at underlying cultural, political, economic, and personal interests and might identify the social origins of hypotheses, concepts, and theories (see also Danziger, 1997; for an example, see Teo, 2009). (ii) An *analysis of the context of justification*: this approach refers to identifying selective sampling or selective data reporting, as well as the reliability, validity, and objectivity of the concepts and instruments used, or the presentation of correlation as causation, and so on. Studies in this tradition investigate the *logic of research* that, for example, has led to scientific racism. (iii) An *analysis of the context of interpretation*: here, one analyzes the relationship between theory, data and discussion and assesses the quality of the interpretation of data in psychological studies. One would also be interested in the consequences of interpretation. This hermeneutic perspective does not exclude the two former perspectives. On the contrary, all types of reconstructions complement each other and provide a better understanding of empirical research in the social sciences.

For instance, a critical study would be focused on those socio-historical developments that led to an interest in studying IQ differences, the validity of the concept of IQ, and how an empirical finding of IQ differences is representative of a theory of inherited differences between racialized groups. In addition, one would look at how empirical findings of IQ differences are interpreted and at the consequences of interpretations of inherited differences on the *Other*, the public, or the academic discourse. An important part of such a program would not only be the deconstruction of the concepts of *race* or *IQ* but also an assessment of the relationship between empirical research and interpretations.

Earlier I mentioned that ideas and hypotheses themselves could be labeled as violent. Indeed, it would not be difficult to identify violent hypotheses or ideas ('do women enjoy being abused,' 'was there ever a Holocaust'). But hypotheses and ideas are not considered knowledge within the traditional logic of research; yet, the theoretical interpretation of empirical data is presented and understood as *knowledge*. Some researchers enjoy pointing out that there should be no censorship on what hypotheses can be studied. Thus, a focus on and a critical analysis of violent hypotheses would soon be trapped in a debate over what research should be allowed. This would put critics quickly on the defensive. Yet, a focus on the theoretical interpretation of empirical data (*knowledge*) would put the onus on the researcher to justify his or her interpretations, whereas a critic would need to identify the issue of representation and underdetermination and point to the hermeneutic deficit within research on the *Other*.

Hermeneutic Deficits and Responsibility of the Social Scientist

Finally, I would like to consider the idea of epistemological responsibility (see also Code, 1987). Do researchers need to be conscious of the consequences of their interpretations on the *Other*? I would argue that they must consider the problem of the hermeneutic surplus of interpretations and the hermeneutic deficits of empirical research and that they must take into account the need to become self-reflective and, if possible, educated and trained in hermeneutics (the art of interpretation) and knowledgeable regarding the

relationship between data and interpretation. Yet, social scientists who are experts in particular areas assume that they have a superior understanding of the events and objects in their area of research. That may be a self-misunderstanding. Instead, I recommend that besides studying the context of discovery and justification, researchers should become aware of the possible limitations of their own interpretations and should be particularly careful when interpreting differences between 'us' and the *Other*.

Empirical psychologists turn a hermeneutic deficit (one interpretation among many possible) into a surplus (one interpretation is presented as knowledge). The hermeneutic surplus, the presentation of a particular interpretation as knowledge, imparts meaning to data and makes results understandable. Data are understood better than they would be if they were to present themselves. Interpretations have a hermeneutic function for the authors themselves, for peers, and for other readers. Most clearly the hermeneutic surplus is expressed in textbooks and in the mass media. Textbooks and mass media do not report detailed data but provide a hermeneutic summary of the results based on authors' hermeneutic interpretation of the results. Sometimes, this is solely expressed in one sentence, as in the following: 'Studies have shown that small-eared people are less empathic than large-eared people and *earedness* is highly heritable.' Of course, it should be mentioned that presenting only the data and leaving out the discussion section in a scientific article would not remedy the situation because interpretations would be confined to laypersons' interpretations of data. Given the political affordances of certain topics (Teo, 2005), we should not expect that this would lead to better interpretations. Indeed, the field would be left with a pandemonium of interpretations, or worse, interpretations that reflect 'common sense' ideologies of racism, classism, and sexism.

The hermeneutic surplus goes hand in hand with the rhetoric of 'facts.' But facts or empirical knowledge, or even truth, contain data *and* interpretations. This is not understood sufficiently by scientists and psychologists. One could label this phenomenon as a self-misunderstanding of empirical psychology: Although it is clear that data and interpretations (discussions) are separated in a scientific article, authors often present their discussions as knowledge and facts. Historical examples demonstrate the meaning of a hermeneutic surplus more clearly because common sense interpretations or interpretations embedded within a Zeitgeist have shifted away from these historical interpretations, and the absurdity of the discussions is often clearly seen (e.g., the belief that Italians are by nature less intelligent than Northern Europeans).

It appears to me that the discipline is lost when it comes to the interpretation of data. Interpretation is left to the hermeneutic competence of the individual researcher, who might not be aware of the role of understanding in interpretation and of his/her own hermeneutic deficits. In the context of scientific racism, sexism, and classism, I suggest that the methodological part is only secondarily responsible for biased research and that the larger part is a result of the hermeneutic deficit combined with the worldviews and ideologies of researchers. This hermeneutic deficit appears when the epistemological, the ontological, and indeed, the ethical meaning of studying group differences is not understood and when rules, criteria, and guidelines for valid interpretations are not provided by the discipline.

Interpretations have an impact on people and they have practical and ethical consequences. If I were to choose an interpretation that suggests that it is in the nature of small-eared individuals to be less empathic than large-eared individuals – and this choice is made in the context of an existing social division – then consequences are implied. Opposing interpretations that suggest that small-eared people are actually superior in certain respects to large-eared people are also embedded in a hermeneutic structure that

is not determined by data. Bad interpretations may occur on all sides. The denial of the impact of interpretations, a problem that is not understood in the empirical social sciences, can also be traced back to the idea of value-neutrality. But rather than spending time on defending something that is impossible, I recommend reflections on the implicit and often biased *forms of intuition* (Teo & Febbraro, 2003) that guide empirical researchers.

Short Biography

Thomas Teo is Associate Professor in the *History and Theory of Psychology Program* at York University and current editor of the *Journal of Theoretical and Philosophical Psychology*, published by the Educational Publishing Foundation of the American Psychological Association. He has published historical and theoretical articles in *Theory & Psychology, New Ideas in Psychology, Canadian Psychology, Journal of the History of the Behavioral Sciences, History of Psychology, Humanistic Psychologist,* etc. His latest monograph *The Critique of Psychology: From Kant to Postcolonial Theory* was published in 2005 (Springer) and his latest co-edited book from 2009 *Varieties of theoretical psychology: International philosophical and practical concerns (*Captus*)* address the intersection of philosophy, metatheory, and psychology. Currently, he analyzes the historical and theoretical foundations of psychology based on critical-hermeneutic analyses, including the ontological, epistemological, and ethical challenges to psychology. He reconstructs the history of psychology as the history of the critique of psychology, the history of philosophical psychology, and the history and theory of scientific racism in psychology and the human sciences. He is Fellow of the Canadian Psychological Association and executive committee member in historical and theoretical divisions of various academic organizations. More information can be found on his website: http://www.yorku.ca/tteo.

Endnote

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