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TOWARDS RECONCILING THE SOCIOLOGY OF KNOWLEDGE AND COGNITIVE PSYCHOLOGY*

INTRODUCTION

This essay prospects for pathways to bring together two traditions of thought that, at first sight, seem at odds with each other: the sociology of knowledge and cognitive psychology. This is a much-needed reconciliation attempt in light of the meaningful contributions brought by cognitive psychology, particularly by the heuristics and biases research tradition, to frame some contemporary issues also considered of great interest to the sociology of knowledge. Importantly, my aim here is not for a definitive synthesis between psychology and sociology but only to explore paths hitherto underexplored toward reconciling the debates in those two fields of inquiry.

This endeavor is part of a broader research project, which tackles the social circulation of misinformation and the persistence of ignorance of facts that, today, we are in a good position not to ignore. Although both psychology and sociology elaborate on this subject, the exchange between these two traditions remains incipient. The idea of bringing sociology and psychology together is far from new within social sciences, but many sociologists, in practice, tend to focus on a specific branch of psychology: psychoanalytic theory. This trend holds particularly true within the sociology of knowledge. As for other research traditions in psychology, especially those reliant on natural science methods, dialogue does exist, but is still all too timid.

What is more: on several instances when I mentioned to other social scientists the idea of bringing sociology under the same roof as cognitive psychology, this was met with a great deal of resistance.

There arise variants of criticisms concerning the artificial nature of cognitive psychology experiments or its alleged blindness to the influence of social context in the formation of individual beliefs, which I will reconstruct later in this paper. Some of the unease many social scientists manifest towards this research tradition seems to stem from the fact that it operates within the theoretical framework of natural sciences, often labeled 'positivist' by us, social scientists, and then discarded without further consideration. I consider such an attitude an obstacle to fruitful exchanges between the two fields, and it is why the discussion I put forth in the second part of this essay takes as its primary theoretical reference Georg Simmel, well-known for his anti-positivist approach to sociology.

This essay comprises two sections, aside this introduction. In the first section, I outline three underlying assumptions of the sociology of knowledge and discuss whether and to what extent they are consistent with cognitive psychology studies. In the second section, I bring some of Simmel's ideas closer to findings from contemporary cognitive psychology experiments.

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Even though the sociology of knowledge arose as a specific field of inquiry and was thus named only in the 1920s following works by Max Scheler and Karl Mannheim, we can already trace some first steps towards approaching knowledge from a sociological standpoint in the 19th century, in Marx's theory of ideology — as Mannheim (1998: 63-74) acknowledges. Other authors from the classical generation, such as Pareto and Weber, can also be considered forerunners of this hitherto unnamed tradition of thought. However, as other works on the subject already exist, I will focus here on the contributions of two classical sociologists: Durkheim and Simmel.¹

In 1903, Durkheim and Mauss published their essay "De quelques formes primitives de classification," in which they proposed to identify the origin and social basis of the fundamental categories of human thought according to philosophical theory (e.g., time, space, and causality). By doing so, sociology and anthropology took upon themselves a theme that, until then, was a privileged subject matter of philosophy. Durkheim further developed this line of investigation, the most complete formulation of which appeared in the final sections of his 1912 book Les Formes élémentaires de la vie religieuse.

Around the same time, on the other side of the Rhine, Simmel also tackled the social dimension of knowledge, but with an emphasis different from Durkheim's: while the latter proposed to trace human knowledge back to its origins or social foundations, Simmel investigated, in the excursus to the first chapter of his Soziologie (1908), how our cognition processes might condition social life. Despite this difference in approach, both challenged the

monopoly that philosophy held on knowledge as a subject — and the history of the sociology of knowledge is riddled with challenges of the sort.

Both Durkheim's and Simmel's challenges were self-contained when compared to Mannheim's, whose project for the sociology of knowledge is a landmark for generations that followed. Mannheim introduces his most influential contribution to the field — his Ideology and Utopia, in the 1936 English and expanded edition — stating that the "book is concerned with the problem of how men actually think" (cf. Mannheim, 1998: 1). When read in context, this statement implies a strong criticism of what the author labels as traditional epistemology which, according to him, operates with an abstract and overidealized notion of knowledge. This notion, as he sees it, reasonably conveys the systematic and indisputable knowledge it aims at but fails to adequately portray how people think in practice. Mannheim does not directly deny that such an 'idealized' conception of knowledge has a proper domain of validity but he restricts this domain to a few exceptional cases of application, such as mathematical proofs. The knowledge that informs the bulk of our daily actions is, in his view, of an entirely different kind. To understand this kind of knowledge one would need to look closely into its roots in social life, trace it back to the conflicts around which society organizes itself, and do so without losing sight of the link between thought and action, between knowing and acting.

Less than two decades later, Alfred Schütz would criticize the sociology of knowledge developed under Mannheim's wing for giving excessive emphasis to issues such as "the ideological foundation of truth in its dependence upon social, and especially economic, conditions" (Schütz, 1946: 464). Instead, Schütz argues that the sociology of knowledge should focus on the social distribution of everyday knowledge — the kind of knowledge that frames our most ordinary actions. In his view, this implies examining "the way in which the wide-awake grown-up man looks at the intersubjective world of daily life within which and upon which he acts as a man amidst his fellow men" (Schütz, 1953: 4). Schütz's approach, which paves the way for the sociology of common sense, differs from Mannheim's in several other respects. But the goal pursued by both authors is remarkably similar: to better understand how people think 'in practice' and in such a way as to consider the link between knowledge and society, between knowing and acting.

Browsing the sociology shelves of our university libraries, one will find countless other sociologists elaborating on the relationship between knowledge and society. They often start from different theoretical-methodological frameworks and sometimes fail to dialogue with each other (as shown by Freitas, 2020: 276-287), often reaching conclusions that are not only different but also contradictory. Nonetheless, since Mannheim, we can pinpoint at least three common denominators, three basic assumptions underlying most sociological literature on knowledge, namely:

- (1) The descriptive approach. The sociology of knowledge is usually premised on the notion that a sociological theory of knowledge should not subscribe only, nor mainly, to a normative approach to the subject (that is, one that aims to define what knowledge should be ideally). Its focus is rather predominantly descriptive, tailored to account for knowledge or, strictly speaking, for beliefs² produced and reproduced in non-ideal, mundane settings. The aforementioned phrase from Ideology and Utopia makes it clear that this applies to Mannheim. Berger & Luckmann prescribe something along the very same lines when submitting that the sociology of knowledge should concern itself with whatever passes as "knowledge" in society, signing away to philosophy the question as to the objective validity of such knowledge (cf. Berger & Luckmann, 1966: 15).
- (2) The socio-causal approach. The sociology of knowledge is primarily concerned with identifying social causes for individual beliefs an approach traceable even in the work of sociologists who avoid using the term 'causality,' such as authors from the hermeneutic tradition. It also includes what Merton calls the "signal hypothesis" formulated at the birth of the sociology of knowledge, according to which "even truths were to be held socially accountable, were to be related to the historical society in which they emerged" (Merton, 1968: 514). As Freitas (2020: 268) recently noted, this hypothesis is a distinctive mark of any sociology of knowledge. Besides, it often appears linked to a critical assessment of individualist approaches to the nature of knowledge. Conceiving the knowing subject as a 'solo thinker,' it would therefore not account for the role of socio-historical factors in shaping our ideas.
- (3) The pragmatical approach. The sociology of knowledge generally emphasizes the relations between our ideas and our actions, between thinking and acting. Sociology is interested in what people think (what they believe, know, or do not know about the world) only insofar as these thoughts help us better understand our social actions or social organization itself, only insofar as they shed light upon the practical life of individuals in society.

Evidently, these are but very general features that do not encompass the variety of approaches found in the sociological literature on knowledge. But since my aim here is not to provide an overview of this literature nor to evaluate its merits, but rather to foster dialogue between this branch of sociology and cognitive psychology — which also challenged the monopoly of philosophy on the subject, albeit differently —, this brief outlook should be enough. In what follows, I assess whether and to what extent these three common denominators of the sociology of knowledge are compatible with research in cognitive psychology.

It is now time to peruse the shelves of cognitive psychology, however briefly, focusing on the literature on heuristics and biases. Studies conducted under this research tradition aims at uncovering, mainly through controlled psychological experiments, the practical rules of inference — called 'heuristics' — that we use in everyday life for decision-making.

This tradition was born from the collaboration between Daniel Kahneman and Amos Tversky, beginning in the late 1960s and gaining traction in the following decade. Their research program is well-known for raising criticism of the classical model of rational choice theory to a new level. In short, the classical model assumes that people typically choose "what options to pursue by assessing the probability of each possible outcome, discerning the utility to be derived from each, and combining these two assessments" (Gilovich et al., 2002: 1-2). Despite acknowledging that we make calculation errors, the model tends to explain them as the result of either chance or contingencies that, for all intents and purposes, should be considered random. This classical model fails to account for systematic errors properly, and that is precisely where the research program on heuristics and biases comes in by calling into question the "descriptive adequacy of these ideal models of judgment" (Gilovich et al., 2002: 1-2).

Kahneman & Tversky, and other researchers in this field, argue that a considerable part of our assessment errors are not the result of chance; rather, they are systematic by nature. According to the authors, these systematic errors — or biases — would be a by-product of the practical rules of inference that we successfully employ in many concrete settings. Along these lines, the social psychologists Richard Nisbett and Lee Ross, in a reference work, phrase such ideas as follows: "[...] this book [...] maintains that people's inferential failures are cut from the same cloth as their inferential successes are" (Nisbett & Ross, 1982: xii).

Here we already find a first link between the two traditions under discussion. *Ideology and Utopia*'s opening claim, which submits that the book's primary concern is the "problem of how men actually think," would fit seamlessly in any work within heuristics and biases research tradition, as both adopt a descriptive approach to the subject and criticize an overly idealized understanding of human cognition.

From this point, differences abound. While agreeing that the classical rational choice model fails to adequately describe 'the way people actually think,' many cognitive psychologists consider it normatively valid. Taken as an ideal, something we should strive to get closer and closer to, the model would help us arrive at better, more rational decisions. Conversely, many sociologists challenge, more or less directly, not only the descriptive value of rational choice theory but also its normative value — not by outright denying rationality but rather by arguing that the underlying notion of rationality put forth by this theory (i.e., instrumental rationality) is too narrow. To assess whether and to what extent this is sound criticism is beyond the scope of this paper; however, I would like to suggest that this cleavage reflects a more general trend: the sociological criticism of the rational choice theory is far more comprehensive and radical than the criticism usually raised by cognitive psychologists. This also applies to Mannheim's critique of traditional epistemology, although his rendition of it is quite difficult to uphold.³

The main issue is that such a position takes for granted that any criticism falling short of a complete rejection of rational choice theory would

remain captive to the model. Sociologists from different traditions have argued similarly. Take, for example, Bourdieu's criticism of what he calls the intellectualist approach to knowledge in the final chapter of La Distinction:

The practical 'choices' of the sense of social orientation no more presuppose a representation of the range of possibilities than does the choice of phonemes [...]. The logocentrism and intellectualism of intellectuals, combined with the prejudice inherent in the science which takes as its object the psyche, the soul, the mind, consciousness, representations [...], have prevented us from seeing that, as Leibniz put it, 'we are automatons in three-quarters of what we do' (Bourdieu, 1984: 474).

From the cognitive psychology perspective, such a critique hits the target as long as it refers to the classical model of rational choice theory. But it simply belies most research in the field and certainly the literature on heuristics and biases. Authors aligned with this tradition would agree with Leibniz's intuition. They aim to investigate — albeit with a methodology quite different from that of Bourdieu's — precisely this: the mental mechanisms of our 'automated self.'

This unveils another critical split between cognitive psychology and the sociology of knowledge. Research on heuristics and biases is usually grounded on experimental methodology, tracing back to the research tradition initiated at late 19th century by German psychologist Wilhelm Wundt. As a rule, these experiments are performed under controlled conditions and designed to test specific hypotheses, as well as reproducible4 and subject to mathematical modeling. This bears little resemblance to what we find in most sociological literature on the subject, which relies mainly on interpretative-hermeneutic methods such as content and discourse analysis, documentary, historical and ethnomethodological research, interviews, etc. A recurring criticism leveled by sociologists against cognitive psychology is that experiments in the field are too contrived. By relying too much on studies performed under 'laboratory' conditions these experiments would end up removing by design the subjects of experimentation from their social context, leading to conclusions that tell us too little about the decision-making processes taking place in the 'real world.' Consequently, one would lose sight of social context's impact on forming individual beliefs and the knowing subject would be conceived as a 'solo thinker,' an abstract brain that thinks its thoughts in a historical and social vacuum. Two common denominators of the sociology of knowledge are at play in this critique: the socio-causal and the pragmatic approaches.

By considering the first of those three basic assumptions, we conclude that both the sociology of knowledge and a particular tradition within cognitive psychology purport to investigate the same thing: how people 'really think.' But in reality such traditions not only look at the same subject through different lenses — or, to put it more precisely, use different methodologies to investigate

the issue — but also focus on different aspects of it: sociologists seek to identify the social causes of individual beliefs, whereas cognitive psychologists look into the mental mechanisms involved in belief formation processes.

The two perspectives do clash in many respects, but that does not mean they are incompatible. Both points can be exemplified considering philosopher Alvin Goldman's contribution in his book *Knowledge* in a Social World. Although he fiercely criticizes some of the interpretations and explanations that sociologists and philosophers have given for certain mental phenomena, some of Goldman's main propositions do not deviate much from Mannheim's. The following passage would blend in perfectly with the introduction to *Ideology and Utopia*: "Traditional epistemology, especially in the Cartesian tradition, was highly individualistic, focusing on mental operations of cognitive agents in isolation or abstraction from other persons" (Goldman, 1999: vii).

Mannheim also recognizes that, in practice, "only the individual is capable of thinking" (Mannheim, 1998: 2). It follows that, on the one hand, thought can only be adequately understood with the tools provided by sociology, but on the other, it remains ultimately a mental phenomenon, one taking place within people's heads. But such a concession has no consequences on his theory design. In Ideology and Utopia, it is up to the sociologist to have the last saying on the cause of individual beliefs (cf. Bárbara, 2018: 41-47). The human mind, or so we gather from Mannheim writings, would be merely a neutral arena where opposing social forces clash; a static background that serves as a passive recipient from stimuli provided by the social environment. In Mannheim's perspective (and the same goes for many other sociologists), what ultimately settles the game's outcome can only be found in the realm of social relations, especially those we frame as relations of conflict and competition.

Cognitive psychology research allows us to conceive of this arena as something more than a static backdrop. It enables us to frame it as a scenario with its own complex topography, which contributes, sometimes decisively, to modulate the social stimuli and channel it in a given direction. Or, to mix our metaphors a bit: it allows us to identify the psychological variables involved in belief formation processes and their interactions with sociological variables such as those discussed by Mannheim.⁶

And yet the rapprochement with the literature on heuristics and biases is often met with a great deal of unease by sociologists, who tend to be highly skeptical of research grounded on experimental methodologies, assumed to be incompatible both with the socio-causal paradigm and the pragmatical approach.

For a more concrete example, let us now consider how the contemporary sociologist Raymond Boudon mobilizes the literature on heuristics and biases. On the one hand, he makes a considerable effort to build bridges between sociology and psychology. Case in point: in his book on the notion of ideology, Boudon combines findings from authors such as Kahneman &

Tversky and Nisbett & Ross with Weber's account of magical thinking (Boudon, 1989: 100-104).

When discussing the problem of attachment to error, however, Boudon quickly dismisses the heuristics and biases tradition as "confirming the irrational character of ordinary human thought." He then moves on to say that such a "diagnosis of irrationality," as he puts it, is nothing more than an "artifact engendered by the nature of its experimental protocols" (Boudon, 2017: 82-3)8— a particularly sophisticated rendition of that standard criticism I mentioned.

Boudon's take is not entirely off the mark. Similar critiques are well-known within cognitive psychology itself.⁹ And still, Boudon misses two key points.

First, that a major assumption put forth by the literature on heuristics and biases is that our judgment errors stem from the same mechanisms that also make up for our cognitive successes. As such, they are rather side effects, arising under a specifiable set of circumstances, from otherwise remarkably functional cognitive processes. The same processes of 'ordinary human thought' that are indeed "well adapted to deal with a wide range of problems," and therefore 'rational' in Boudon's terms, would then turn out to be problematic, or 'irrational,' only "when applied beyond that range." 10

The second key point concerns the artificial nature of experiments in cognitive psychology. While such criticism certainly applies to several experimental protocols adopted by cognitive psychologists, to use it to dismiss the whole research program is simply overextending it. Framed thusly, such criticism utterly disregards any methodological advances that might allow, if not to bypass such problems altogether, at least to face them and mitigate their effects. Let us see how social psychologist Norbert Schwarz frames a similar criticism: "Our focus on individual thought processes has fostered a neglect of the social context in which individuals do their thinking and this neglect has contributed to the less than flattering portrait that psychology has painted of human judgment" (Schwarz, 1996: 1).¹¹

Given this diagnosis — a more thoughtful rendition of Boudon's criticism, but one that avoids throwing the baby out with the bathwater —, Schwarz recommends adapting standard experimental protocols to make them more sensitive to the role played by the social context in everyday communication. Of the improvements made in this direction, it should suffice to mention the work of the research group headed by Stephan Lewandowsky on the influence of political beliefs and worldviews on the spread of misinformation.¹²

Despite the limitations inherent to the heuristics and biases tradition, and even though researchers in the field do focus on events taking place within the individual mind, the consensus among them is that, in many situations, we can indeed trace certain individual beliefs back to social causes. Thus, as Mannheim envisioned, one must consider the social and historical context of thought to better understand how people 'actually think.'

But contrary to what Mannheim implied, this does not mean that sociology has to have the final say on the matter, that socio-historical contextualization sufficiently explains belief formation. As long as the sociology of knowledge relinquishes the pretense of explaining mental phenomena by itself — as long as it avoids slipping into sociologism — there is no fundamental theoretical incompatibility between it and the heuristics and biases research tradition.

Boudon ultimately leverages his criticism to ascertain — rather unconvincingly, I would say¹³ — the superiority of his own theory of rationality over other available approaches, including cognitive psychology. This essay has a different horizon in view, one closer — if not in substance, certainly in spirit — to Alvin Goldman's, when he presses us to approach knowledge from a sociological perspective, but taking care not to squander the invaluable insights and discoveries on the matter provided by well-established traditions of thought (such as analytical epistemology and cognitive psychology). Moreover, even though I only mention Goldman's view here, other initiatives, similar in spirit but different in execution, can be found elsewhere in the existing literature.¹⁴

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In the previous section, I addressed the general assumptions underlying the research conducted in the two fields of inquiry under discussion; my goal was to prospect for pathways to bring them closer together. After establishing that no fundamental incompatibility prevents this rapprochement, I will now try to pursue a specific, still untrodden path between them. Hence, I will focus on Simmel's account of the sociology of knowledge, for its inherent plasticity, in my understanding, makes it particularly well-suited to explore the common ground between epistemology, psychology, and sociology.

Let us consider in some detail his thoughts regarding the cognitive assumptions that make social life possible. Simmel labels this line of research the "epistemology of society" and formulates its central question as follows: "Which forms must be at the basis, or, which specific categories must the individual bring along, so to speak, so that the consciousness of forming a society will arise" (Simmel, 1992: 47; 2013: 658).

Simmel develops these ideas in the excursus to the first chapter of his Soziologie, in which he examines three basic assumptions (or a priori, as he puts it) of social life. We will focus here on the first one.

The first "a priori" of social life relates to what we may call interpretative schemes — overarching notions that allow us to make sense of and sort out more specific conceptions about the world around us and about the people who inhabit it. In Simmel's view, such schemes provide the most basic parameters for us to interact with our fellow men in the social world we share. 15

Not only what we know but also what we do not know about each other conditions social life. As Simmel puts it:

[...] complete knowledge of the individuality of another is out of reach for us; and all our relationships with each other are conditioned by the varying degrees of this incompleteness. Whatever its cause may be, its consequence is a generalization of our picture of the other's mind, a blurring of its outlines that adds to the individuality of this image a relationship with others. We imagine every person, with specific consequences for our practical behavior towards him, as the type of person his individuality makes it possible for him to belong (Simmel, 1992: 48; 2013: 658).¹⁶

The assumption is unmistakably Kantian: just as our knowledge of nature is never complete and always entails some degree of ignorance, so too is our knowledge of others, of our fellow men in the social world we share.

Since it is impossible for us to fully know one another, we resort to generalizations. According to Simmel, these are synthesized in our cognition from the fragmentary stimuli we receive when interacting with others. In short, we process inside our head, mostly automatically, the partial impressions that we gather from the people around us, resulting in an artificially coherent picture of whomever we are interacting with. Once this coherence is accomplished by filling in the gaps in our knowledge about the other, we can draw further conclusions about this individual, and, most importantly, about how to adequately interact with them. At this point, Simmel seasons the Kantian premise with a pinch of pragmatism. In the above citation, this can only be read between the lines, when he mentions that the generalization of the picture of the other has "specific consequences for our practical behavior towards him [i.e., the other person]." However, elsewhere in his Soziologie, the pragmatic flavor is unmistakable. In his chapter on the sociology of secrecy and secret societies, for example, Simmel states that "given our accidental and precarious adaptations to our life conditions, we undoubtedly retain or achieve not only as much of truth but also as much ignorance and error as proves useful to our practical activity" (Simmel, 1992: 385-386).

In short: to know how to act towards another person, towards someone who always remains, to some extent, a stranger to us, we see each other as individual types — to name a concept that Simmel himself did not use and to differentiate it from what we might call social types. Simmel's social typification is not that created by sociologists for research purposes but rather one we use in everyday life. In this regard, they resemble what today we think of as professional, class, or gender stereotypes — to give but a few examples. Here we have two separate but interconnected interpretative schemes: to create an individual type (i.e., the typical image of a given person), we often resort to a number of social types (associated with the profession, gender, political affiliation, etc.,

attributed to that person). Simmel's brief discussion of individual typification also parallels what authors such as Nisbett & Ross call "personas," namely: "cognitive structures that represent personal characteristics and typical behaviors of paradigmatic characters" (Nisbett & Ross, 1952: 35). Although variants of this idea can also be found in the work of other sociologists, given my scope in this paper, it suffices to consider how Simmel develops it:

In order to know someone, we do not see him according to his pure individuality, but carried, exalted, or even degraded by the general type under which we subsume him. Even if [...] all the usual overarching concepts of character (moral or immoral, free or dependent, dominant or servile, etc.) fail – in our minds, we still designate our fellow man according to an unnamed type with which his pure being-for-itself does not coincide (Simmel, 1992: 48; 2013: 658).

For the sake of simplicity, we might think of this "pure being-for-itself" as the other "as he truly is." As Simmel argues, this is something we cannot know, just as in Kant we cannot know things-in-themselves, but only things as they appear to us. As such, we rely on individual typification to bypass the limits of our knowledge — a precarious solution, indeed, but one capable to further our knowledge of others and to make life in society possible.

I devised a thought experiment to render Simmel's somewhat abstract discussion more concrete and bring it closer to cognitive psychology. I begin by introducing two individual types: Roberto and Ferrante, as I would like to call them at first.

Roberto is a fellow who always takes his kids to play outdoors. We can see that he shows genuine happiness when playing with them and that he feels terrible when they get sick. We know that he sometimes cries when watching the recordings he made with his wife of meaningful moments in their family life. Roberto's mother, let's call her Mary Louise, witnessed all of this, as she saw Roberto repeatedly prove his love for his children.

Ferrante, on the other hand, is a fellow who, after marriage, convinced his wife to give up her career to stay home and care for the children. We can see that, little by little, he started to mistreat her. First came the psychological abuse, then it escalated to physical aggression, increasingly violent. We know that, on one occasion, when he was already married, Ferrante raped another woman, whom he met only once, without leaving any clues as to his identity. Let us call this victim Jane.

Naturally, Jane considers Ferrante a bad person, a 'monster.' On the other hand, Mary Louise considers Roberto a role model, a 'good man,' or at least a good father.

What neither of them knows is that Roberto and Ferrante are the same person — as Celeste, the wife, and mother of Roberto/Ferrante's children, knows all too well. To avoid confusion, I will henceforth call him by a single name — Perry —, reserving the names Roberto and Ferrante to refer to the

individual types that Mary Louise and Jane, respectively, created to make sense of Perry.

What is more: Celeste knows almost everything about Perry that we do, except what he did to Jane. Only Perry knows everything we know — and other things that we will never know.

Celeste's image of Perry is particularly unsettling to many of us: how could someone like Roberto do the things that someone like Ferrante did?

Our intuition that something seems off with this story does not present itself when we think of Roberto or Ferrante as different individuals, for what we know about each offers an internally coherent picture. If we think carefully, we can surely see that people are not always consistent in their actions; however, even knowing so, the lack of coherence still strikes many of us as a problem. It is more of a challenge to make sense of Perry and to predict his actions than in the cases of Roberto and Ferrante.

Simmel's argument sheds some light on what is at stake here. He pointed out that since we cannot fully know someone else, our understanding of the other relies on "a generalization of the picture of his mind" — a generalization furnished with coherence. However, at least in some cases, this coherence obtains only in the realm of ideas. It is an artificial byproduct of the cognitive processes we rely on to understand others.

This leads us to the connection between action and cognition. After all, we resort to generalizations to know how to act towards others, even if there is much we simply do not know, and cannot know, about them. The coherence we expect to find in others — in Perry, for example — may very well not exist; it may not correspond to any characteristic of Perry, of his "being-for-himself," as Simmel prefers. But there is a reason why we assume the existence of such coherence, a reason why we add it to our picture of the other whenever we interact with them, namely: this coherence facilitates making further inferences about the other, thus providing intuitive and ambiguity-free parameters that allow us to decide more readily on how to further interact with them.

Accordingly, Jane has good reasons to want Perry as far away as possible from her, not to mention to make him pay for his crime. Picturing him as a 'monster,' a 'bad person,' gives her clear-cut parameters to guide her actions towards him. Mary Louise also has good reasons for depicting Perry as a 'good man' and a 'good father' — what she learned about him seems to concur with that picture. And given that this is how she sees him, it makes sense for her to take Perry's side and try to protect him.

Celeste, in turn, is at a crossroads: it is difficult for her to know how to act and commit to a clear course of action. She knows that, on the one hand, Perry is far from a 'good man,' but she also knows that he is not simply a 'monster.' She learned this from personal experience: she saw Perry acting in ways that do not match what one would expect from either of these indi-

vidual types; she saw him do things that neither a 'good man' nor a 'monster' would do. For Celeste, Perry is sometimes moral, sometimes immoral; on some occasions, a good person, on others, a bad one. She designates him, in Simmel's terms, "according to an unnamed type." Even so, my point here — and thus we arrive at a conclusion that Simmel himself did not reach — is that Celeste's predicament hinders her ability to know how to act towards Perry; and what is even more decisive for her, how to get out of this situation.

This difficulty lies in that the socially prescribed course of action for dealing with these different individual types are opposite to each other. The lack of coherence — which only presents itself in Celeste's perspective and precisely because she knows Perry better than Jane and Mary Louise — is critical for us. There is no room for doubt or hesitation for someone in Jane's situation, partially because she does not know certain things about Perry that Celeste does. For Celeste, separating from Perry means leaving Roberto as well, a man whose actions showcased, time and again, his genuine love for their kids and whom their kids undoubtedly love.

Knowing what we know, I want to believe that this essay's reader would agree that Celeste should readily leave Perry — as Jane would advise her if she only knew that Ferrante is Perry. But making such a decision is objectively more difficult for someone in Celeste's position than for someone in Jane's. After all, we have routinized and ready-made recipes for interacting with a person whose actions we manage to fit promptly into some individual type already well established in the social stock of knowledge available to us. We can more easily walk away from someone we unmistakably conceive of as a 'monster.'

The key to understand this difficulty lies in what I call coherence. In the thought experiment above, the issue was the (lack of) coherence in the behavior of an individual type; but the same logic applies to other objects of thought. To further develop this idea, I will now juxtapose our thought experiment with a real-life cognitive psychology experiment.

Broadly speaking, it consists of asking a group of people "According to the Bible, how many animals of the same species did Moses take to the ark?" Most respondents answer 'two,' when the correct answer is 'none,' for the biblical story of the ark involves Noah, not Moses. This is known as the "Moses illusion."

The Moses illusion only occurs under specific circumstances, disappearing as soon as we replace Moses with another character with no apparent relation to Noah — like Nixon (cf. Park & Reder, 2003: 281-2). Thus, a commonly accepted explanation for the phenomenon is that "everyday cognitive processing should be based on simple heuristics, such as identifying partial features of a set, rather than exact correspondences" (Park & Reder, 2003: 289-90). This is referred to in the literature as partial matching. Moses and Noah belong to the same semantic family, i.e., they share the partial feature of being a biblical figure. When we think of either in the context of a question that lists other elements from the same semantic universe (the Bible, the

story of the ark, etc.), such a general characteristic becomes salient enough to induce our cognition to overlook the difference between Noah and Moses. This happens even among individuals who are familiar with the biblical narrative.

What matters for us is not the error in itself, but the mechanism behind it: the idea that our cognition 'completes' the gaps in our knowledge with predefined, coherent mental schemes that are familiar to us. Note that the same operation that leads to systematic error in this case may prove a valuable resource in a different scenario. As Park & Reder state:

It might seem that partial matching is a less-than-ideal way to process information; however, the partial match process is not only common and normal but also a necessary mechanism of our cognitive system. This partial match process enables useful communication and comprehension. Very few things that we see or hear will perfectly match the representation that we already have stored in memory [...]. A rigid comprehension system would have a difficult time indeed. Many of our cognitive operations are driven by familiarity-based heuristics rather than careful matching operations (Park & Reder, 2003: 289-299).

We find this same basic motif in Simmel's reasoning: we are stuck with less-than-perfect or even precarious solutions to problems arising from the intrinsic limits of knowledge. Given this necessary ignorance of ours, our cognition is bound to reproduce as much truth "but also as much ignorance and error as proves useful to our practical activity." However, two differences are worth noticing. First, the literature on heuristics and biases allows us to go beyond the basic insight proposed by Simmel, for it takes a closer look into a number of specific mental mechanisms underlying everyday cognition (in this case, partial matching). Second, such literature manages to map the various systematic errors that occur when our automated self takes control in situations where it would be better to resort to "careful matching operations" — operations we also perform, only not all the time, as they take much more time and effort.¹⁸

Kahneman & Tversky (1983: 294) speak of "natural judgments" when referring to the everyday judgments operated by our automated self. I would like to suggest that this notion fits well with Schütz's discussion of "natural attitude," which refers to the "state of consciousness in which we accept the 'reality of everyday life' as something given" (Dreher, 2011: 494). Schütz's "natural attitude" refers to a broader complex of mental structures that make possible the lifeworld (as he puts it, following Husserl). We can further develop the interface between the sociology of knowledge and cognitive psychology by understanding those natural judgments as a part of this natural attitude. Evidently, our automated self is not always in the driver's seat — on this, both Schütz and Kahneman & Tversky would agree —; it often misfires and, in these situations, we tend to set it aside and resort to more onerous cogni-

tive operations. We break with the natural attitude and 'think better,' i.e., more carefully.¹⁹

Schütz would argue that the break with the natural attitude, although often necessary, can never be the rule. But he would do so without entertaining the possibility, which becomes all the more evident when approaching the issue from the perspective of cognitive psychology, that if, on the one hand, we do arrive at many of our worst decisions when our automated self takes control in situations that require careful reflection, on the other, there are also plenty of situations in which our decision-making is made all the more difficult because we reflect too carefully on a well-known issue.

Celeste's story well illustrates the point. She knows Perry better than Jane, and that makes it is all the more difficult for her to know how to act in comparison. Bacon's cliché that "knowledge is power" does not apply here, as in many cases. Further, it takes more persuasive power to convince someone in Celeste's position that Perry is a 'monster' than someone in Jane's. After all, Celeste knows many things about Perry that do not fit this picture. After moving away she might more easily picture him as a 'monster'; but as long as they are still together, this depiction will be unlikely to sway her. Not for lack of careful thinking but because of it.

Perhaps a more promising persuasive strategy would be to undermine these archetypes altogether, inviting Celeste to think beyond them. To remind her that types such as 'monster' and 'good man' are ultimately mental fabrications, just like Moses and Noah.²⁰ Fabrications that we create to help make sense of the world around us and that, therefore, we must be willing to let go if they prove unhelpful. The right call — leaving Perry — is not premised on Celeste being able to picture Perry as a 'monster.' It is enough that she takes to heart the risks that she, and her children, are exposed to as long as Perry is around — risks that she knows all too well.

But this is a thought experiment and not a true story. If Celeste were a real person in the real world and not a character inspired by a fictional piece, we would need to consider other elements to better explain her situation. To conclude this essay, I would like to address a possible objection to this thought experiment and help us to better grasp its applicability in explaining real-life situations.

The standard sociological interpretation of such a case is to explain it in terms of power. As such, one could object to the interpretation outlined above — let us call it the "cognitivist" approach²¹ — by arguing that it loses sight of a key aspect, namely: that the relationship between Perry and Celeste is asymmetrical, in the sense that he is in a better position to impose his will onto her, than she, to impose her will onto him.

If this were a real-life situation, it would be fitting to inquire, for example, to what extent Celeste is financially dependent on Perry. Money could very well be one of the main sources of his power: maybe Celeste fears leav-

ing him because she might risk running out of money to pay the bills, including those that allow her to offer a good life to her children. She might also fear for her physical integrity, as the mere threat of separation might be retaliated with great violence. These are valid considerations and, in some situations, may alone explain why someone like Celeste would stay with someone like Perry. But the power approach does not rule out the cognitivist approach. If it is indeed objectively difficult for Celeste to figure out 'who Perry is' and how to act towards him, this can only be yet another source of power for him. If Perry appeared to Celeste only as a 'monster,' or only as a 'good man,' it would be easier for her to devise a clear-cut course of action. Perry might also strategically exploit Celeste's hesitancy in order to prevent her from leaving; he might use her predicament to consolidate his position of power. In this scenario, Celeste's objective difficulty in reducing Perry to a given individual type might be a factor, among others, that adds up to a more comprehensive explanation of where the power he wields comes from.

An important implication is that even distinctly sociological phenomena — such as power — are not made up of sociological components alone. It matters how our cognition functions. The mind is more than a formless arena in which opposing social forces clash; it might even affect the outcome of the struggle itself.

But this leads us further away from Simmel's contribution to the sociology of knowledge. He does not mention power relations at all, nor does he make further forays into the discussion of how our interpretative schemes are consolidated in the social stock of knowledge and yield routinized recipes for action. Other sociologists further developed these issues in different directions, such as Bourdieu and Schütz. But even they did so without a detailed investigation of the mental mechanisms that, as I have argued, help us to better understand 'how people actually think.'

Hence the importance of connecting sociology to research in other fields of inquiry, including those we label 'positivist.' Besides, as I argued here, we have much to gain from establishing a conversation between our classical sociology, and even the anti-positivist kind of classical sociology, and this 'positivist' research tradition so different from ours at first glance, but that ultimately seeks to answer questions remarkably similar to those which concerns us the most.

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NOTES

- * I would like to thank the PNPD-CAPES for the PhD grant, which made possible the research for this essay, as well as the Sociology Department at the University of São Paulo for hosting the research. A preliminary version of this work was presented at the 44th ANPOCS Annual Meeting in 2020.
- 1 For a canonical reconstruction of the contributions of these and other forerunners see Stark, 1958; for a more didactic account, see Crespi & Fornari, 2000.
- 2 One of the controversies within the sociology of knowledge is its definition of what counts as knowledge. What many sociologists, such as Mannheim or Berger & Luckmann, portray as knowledge would be better defined as belief. In epistemology, belief entails any epistemic attitude that involves a truth claim. Such a claim can be either true (in which case one of the conditions for us to speak of knowledge is satisfied) or false (in which case it makes no sense to speak of knowledge). We should keep in mind that this stricter definition of belief departs considerably from our common-sense or everyday usage of the corresponding notion. In everyday life, we sometimes speak of belief when we wish to convey a lesser degree of certainty or assurance than we would if we were to talk in terms of knowledge. This is the case of statements such as: "I don't believe that the Earth is round; I know that it is round."
- 3 This is not, however, the place to further discuss the issue. For a criticism of Mannheim's criticism, see Bárbara, 2018: 23-55.
- 4 In recent years, the reproducibility of experiments in cognitive psychology has become a matter of controversy. This happened after several attempts to reproduce original experiments, already published and whose results were incorporated by the scientific community, failed to produce the same results. For a reference paper on the subject, see Open Science Collaboration, 2015.
- 5 Not in Ideology and Utopia. Even the mentioned concession only appears in Mannheim as a hook for an argument that culminates in this conclusion: "Strictly speaking it is incorrect to say that the single individual thinks. Rather it is more correct to insist that he participates in think-

- ing further what other men have thought before him" (Mannheim, 1998: 3).
- 6 The same main idea applies to other branches of psychology research, such as neuroscience which I will not discuss in this essay, for it would require too long a digression. The reader interested in this approach can start with Turner, 2014. His reconstruction of Simmel's ideas is not without problems and should be taken with a grain of salt. Nonetheless, I concur with the main criticisms put forth by the author, namely: (1) that notions such as 'understanding' and 'culture,' central to all social theory, should make room for neuroscience discoveries; and that (2) many social scientists (including Simmel) conceive of 'culture' and 'understanding' in a way to all intents and purposes metaphysical (or "lacking neuronal correlates," in Turner's terms).
- 7 Or, as Boudon himself puts it, when he investigates how "dubious, false or fragile ideas" crystallize (see Boudon, 2017: 71).
- 8 For a more detailed rendition of the argument, see Boudon, 1996: 129-136.
- 9 For a summary and rejoinder of the criticism according to which the heuristics and biases tradition portrays the human ability to make good decisions in an overly pessimistic manner, see Gilovich et al. (2002: 8 et seq.).
- 10 Excerpts in "double quotes" are paraphrases from Nisbett & Ross (1982: xii), while the ones in 'single quotes' are adapted from Boudon (2017). To be more precise, Nisbett & Ross do not resort at this juncture to the "rational vs. irrational" dichotomy, which is how Boudon chooses to frame the issue; they speak only of inference successes and errors.
- 11 The quote was taken from the introduction of a book dedicated to this subject. In it, Schwarz showcases several experimental protocols that produce artificial results, such as those criticized by Boudon. For another rendition of the debate, see Gilovich et al. (2002: 11).
- 12 See, for example, the summary in Lewandowsky et al., 2012: 118-119.
- 13 In his critical review of Boudon's book, Gabriel Peters (2019) reaches a similar conclusion concerning the shakiness of Boudon's criticisms.

- 14 Such as Christian von Scheve's work on the sociology of emotions (cf. von Scheve & von Luede, 2005).
- 15 Simmel himself does not use the word "scheme" in this context; that is how I prefer to put it. The term has the advantage of being used both by sociologists, such as Schütz (who adds the adjective "interpretive"), and by psychologists aligned with the heuristics and biases tradition (see, for example, Nisbett & Ross, 1982: 32-35).
- 16 Unless explicitly stated otherwise, the translations from German are mine.
- 17 A recent review of the literature on the subject concluded that this remains the best explanation for the Moses illusion (cf. Speckmann & Unkelbach, 2022: 368).
- 18 With this, we arrive at the dual process theory, the most famous contribution of cognitive psychology. Further exploring the subject would require more space than I have left, so it will suffice to indicate a brief introduction to the topic: Kahneman, 2011.
- 19 It should be noted that the authors under discussion would paint quite a different picture of these "more onerous cognitive operations." For Schütz, they correspond to what he calls the phenomenological attitude; for authors such as Kahneman & Tversky, to analytical reasoning. I submit that this is where the criticism of the narrow conception of rationality underlying cognitive psychology research hits the nail on the head although some formulations of this criticism (such as Mannheim's) do not seem particularly sound to me, as I indicated in the first section of this paper.
- 20 Or, in Moses and Noah's case, to convey moral teachings and consolidate religious sentiments.
- 21 Here, the phrase has a different meaning from that used in Boudon (1996).

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TOWARDS RECONCILING THE SOCIOLOGY OF KNOWL-EDGE AND COGNITIVE PSYCHOLOGY

Keywords

Sociology of Knowledge; Heuristics and Biases; Karl Mannheim (1893-1947); Georg Simmel (1858-1918); Moses illusion.

Abstract

This social theory essay prospects for pathways for bringing together two seemingly unrelated traditions of thought: the sociology of knowledge and cognitive psychology. Such an endeavor is pursued at two different levels. First, I lay out three general assumptions underlying the sociology of knowledge, as conceived by several authors from Karl Mannheim onwards, examining whether and to what extent they are compatible with contemporary cognitive psychology studies, especially in heuristics and biases research program. Second, I bring under the same roof some of Georg Simmel's ideas about the cognitive assumptions that render social life possible and some contemporary findings on heuristics and biases by connecting a thought experiment built upon Simmel's ideas to a set of real-life experiments conducted in cognitive psychology.

PARA UMA APROXIMAÇÃO ENTRE A SOCIOLOGIA DO CONHECIMENTO E A PSICOLOGIA COGNITIVA

Resumo

Neste ensaio de teoria social, prospecto vias para aproximar duas tradições de pesquisa aparentemente desconexas: a sociologia do conhecimento e a psicologia cognitiva. Tal empreendimento é conduzido em dois níveis diferentes, primeiro, delineio três pressupostos gerais que informam a sociologia do conhecimento, tal como concebida desde Karl Mannheim, e examino se tais pressupostos são compatíveis com estudos contemporâneos no âmbito da psicologia cognitiva, e em especial no programa de pesquisa em heurísticas e vieses. Segundo, coloco sob o mesmo teto, de um lado, algumas ideias de Georg Simmel sobre os pressupostos cognitivos que tornam possível a vida social, e, de outro, achados da pesquisa contemporânea em heurísticas e vieses. Esse segundo passo é dado mediante a aproximação de um experimento mental, construído a partir das ideias de Simmel, com uma série de experimentos reais no âmbito da psicologia cognitiva.

Palayras-chave

Sociologia do conhecimento; Heurísticas e Vieses; Karl Mannheim (1893-1947); Georg Simmel (1858-1918); Ilusão de Moisés.

