

ANALYTICAL ESSAY

The Sociology of Knowledge as Postphilosophical Epistemology: Out of IR's "Socially Constructed" Idealism

INANNA HAMATI-ATAYA

Aberystwyth University

This article first aims to draw attention to, and diagnose, the failure of IR's sociological turn to extend the domain of sociological reason into the philosophical turf of epistemology and thereby fulfill the full promises of the postpositivist turn. Its second purpose is to revive and deploy the radical version of the sociology of knowledge that can achieve an autonomous reconstruction of epistemology suited to a reflexive, post-Kantian consciousness. The diagnosis begins by tracing the erasure of the radical sociological position in the connected evolutions of sociology and international relations (IR). It shows that the derailing of the "sociological revolution" was paradoxically mediated by the consolidation of social constructionism and science studies, reproduced in IR through their counterparts in the "sociological turn": constructivism and the sociology of IR. In these otherwise reflexive developments, the progression of sociological reason was halted by a self-imposed limitation on the extension of sociological analysis to all domains of thought and the endorsement of an idealist and institutionalist ontology of the social. A reformulation of the forgotten, radical sociological position clarifies the implications for IR of a transition to a postphilosophical theory of knowledge and delineates an empirical research agenda for such a reconstruction of epistemology driven by a sociology of knowledge of a revolutionary persuasion. Exploring the centrality of social practice in the social determination of knowledge, the article argues that, and shows how, a properly reflexive reconstruction of epistemology is best achieved by deploying the sociology of knowledge in two complementary materialist directions: (1) a sociology of everyday social practices that illuminates our epistemic immersion in the carpentered environments of the

Inanna Hamati-Ataya is Reader in International Politics at Aberystwyth University, UK. Her current research lies at the intersection(s) of world politics, social theory, global history, natural and historical epistemology, and the sociohistory and anthropology of knowledge, science, and technology. She is since 2013 a Marie Curie fellow under the European Commission's 7th Framework Programme for Research and Innovation.

Acknowledgments: I am most grateful to *International Studies Review's* editors and anonymous reviewers for their very thoughtful, challenging, and constructive feedback throughout the peer-review process. Early formulations of the argument were presented at the Department of IR of the University of Sussex (2014), at an Ideaslab organized by Christian Bueger at Cardiff University (2014) and at the Department of Politics of Newcastle University (2015). Many thanks to the organizers and to all participants for the stimulating discussions and comments. My deepest gratitude goes to Andreas Gofas and Nick Onuf for their endless generosity and support and for their feedback on different versions of this article. The earliest draft was used in the seminars on the history, philosophy, and sociology of IR that we cotaught at the 2016 Olympia Summer Academy. Gabrielle Magro introduced me to Alfred Sohn-Rethel long before I understood I needed to encounter him. I am indebted to her for this intuition. The research leading to this article received funding from the European Commission under the European Union's 7th Framework Programme for Research and Innovation (grant agreement No. 322146).

Hamati-Ataya, Inanna. (2017) *The Sociology of Knowledge as Postphilosophical Epistemology: Out of IR's "Socially Constructed" Idealism*. *International Studies Review*, doi: 10.1093/isr/vix028

© The Author (2017). Published by Oxford University Press on behalf of the International Studies Association.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted reuse, distribution, and reproduction in any medium, provided the

socionatural order and (2) a sociology of craft that objectivates the social constitution of the *skholè* as a mode of existential boundedness by addressing scholarly thought as differentiated social labor.

Keywords: sociology of knowledge, epistemology, reflexivity

Sociologizing IR: The Turn That Tamed a Revolution

La science n'a pas la philosophie qu'elle mérite.

(Bachelard 1953, 20)

Traditional philosophical epistemology . . .

has come to the end of its road.

(Elias 1982, 36)

Over the past few decades, the field of international relations (IR) has witnessed an important transformation driven by an awakening to the historicity and social situatedness of its knowledge and the desire to inscribe this awareness into its theoretical and methodological frameworks, practice, and ethos. To date, the sociological turn carrying this reflexive agenda has failed to coherently extend the domain and reach of the sociological understanding of knowledge to epistemology itself, thereby preserving and reproducing the classical division of intellectual labor between sociology and philosophy, whereby the understanding of the sociohistorically contingent realities of knowledge and knowing has no bearing on the general epistemic categories and standards through which knowledge is defined, pursued, and evaluated.

In endorsing what this article will show to be an unsustainable division of labor, the sociological turn has in effect undermined the full extension and conclusive deployment of IR's postpositivist and reflexive consciousness, by impeding the advent of "the sociological revolution": "the supersession of philosophy as such and the reformulation of the problems once generated there onto another level by sociology" (Kilminster 1998, 15). In the case of epistemology, this is manifested as a failure to reconstruct the theory of knowledge as a social theory proper: a general theoretical account of knowledge grounded in epistemography (Dear 2001), that is, in an empirical investigation that takes the ontological status of knowledge seriously as a social phenomenon originating in the externality¹ of social life, not in the imagined inner processes of an idealized universal mind.

While this article focuses on epistemology, its implications extend to all domains falling within philosophy's classical purview, including ontology and ethics. The wider issue of IR's relation to philosophy—specifically, to its idealist-normative posture—pertains to our endorsement of philosophers' self-definition as "conceptual trouble-shooters, arriving on the doorstep of the sciences . . . with a conceptual toolkit ready to tune up their theories" and "provide a rigorous, conceptual expertise in the interest of clarification" (Kilminster 1998, 22). This peculiar, subordinated position that denies us our epistemic autonomy and autonomous judgment is widely accepted as an orthodoxy within IR, as recently exemplified in Patrick Jackson's influential *The Conduct of Inquiry* (Jackson 2011, 25) as well as in responses to it.

Jackson's intervention is heroic in its systematic deployment and stretching of the philosophical framework to accommodate all manifestations of IR's postpositivist and reflexive consciousness, including its growing sociological sensibility. But in buying

¹I use the notions of externality and externalist analysis throughout as extensions of Durkheim's conceptualization of social phenomena as being external both to the individual manifestations of consciousness and to the mental/psychological processes of the mind (Durkheim 1894).

into philosophy's clarifier role, it fails to notice its breaking point. This article travels the path to, and beyond, this point by delineating an alternative epistemology that properly embodies the critical *and* reconstructive potential of our newfound reflexivity. It thus challenges the notion that "the philosophy of IR" is not part of "our main vocational task" (Jackson 2011, 17) and thereby takes us a step closer to establish "the philosophy that [we] deserve" (Bachelard 1953, 20).

The philosophy we deserve is one whose categories and problematizations adequately reflect our current understanding of the social world and of our knowledge as an integral, dynamic part of that world; it is therefore a philosophy that accompanies the sociohistorical transformations of our epistemic consciousness and thereby transforms its own normative instruments on the basis of that evolving social history. Before such a recursive, existentially grounded, and autonomous process can replace the static, idealist, and heteronomous one currently defining the rules of our epistemic thought and conduct, philosophy and epistemology first have to be fully brought back into the social world to which they naturally belong.

While IR's postpositivist turn was from the beginning informed by just such an intuition, the disjunction between this intuition and our continuing practice of turning to *a priori* philosophical standards to order and guide our understanding of knowledge, science, and theory (Hamati-Ataya 2016) has prevented a conclusive formulation/resolution of the problem of epistemic foundations that the relativist, historicist critique has produced. In adopting a consistently naturalist perspective that focuses on epistemology as the domain that best crystallizes this disjunction, this article aims to illustrate what it would mean to reclaim the philosophy of IR as a *coherent, autonomous, and critical* endeavor, but also demonstrate that until this has been successfully achieved—in actual *practice*—the postpositivist turn will remain incomplete, inconclusive, impotent, and harmful to our epistemic aspirations and social role.

The article advances these objectives in two steps. The first, critical part begins with a diagnostic effort to trace the history and erasure of the radical sociological position on knowledge in the connected evolutions of sociology and IR. My argument here is that the derailing of the sociological revolution was paradoxically mediated by the consolidation of social constructionism and science studies, reproduced in IR by their counterparts in the sociological turn: constructivism and the sociology of IR.

In these otherwise reflexive developments, the progression of sociological reason was halted by a dual process: (1) a self-imposed limitation on the systematic extension of sociological analysis to *all* products and levels of thought, which has prevented a reappropriation of epistemology as an *object* of sociological inquiry and (2) the endorsement of an idealist and institutionalist ontology of the social that has undermined the original, bold ambition of the sociology of knowledge, namely, to explain the products of *thought* (including epistemology) as *exogenously* constituted in the *material* processes of social life.

Following this analysis, I reformulate the radical sociological position through the works of major theorists of the social determination of knowledge and distinguish two pathways of social determination (*social production* and *social differentiation*) that produce epistemic consciousness through two kinds of existential boundedness (*Seinsgebundenheit* and *Seinsverbundenheit*). This allows me to both clarify the implications for IR of a transition to a postphilosophical theory of knowledge and define an *empirical* research agenda for such a reconstruction of epistemology driven by a sociology of knowledge of a revolutionary persuasion.

The second, reconstructive part of the article focuses on the latter objective by proposing a concrete research program that revives the legacy of social-determination theorists in the light of recent advances in sociological and philosophical research whose implications for epistemology have not systematically been explored as such. I first put forth social practice as *the* social phenomenon wherein the externalist and materialist parameters of the social-determination thesis converge and crystallize conceptually and empirically. Against current orientations in IR's science studies and

practice turns, I argue that empirical praxeology is the most cogent way of reconstructing epistemology instead of ignoring it.

To demonstrate this, I develop in explicitly praxeological terms the two pathways of social determination previously discussed and show how an empirically grounded sociological reconstruction of epistemology requires the deployment of the sociology of knowledge in two complementary materialist directions: (1) a sociology of everyday social practices that illuminates our epistemic immersion in the carpentered environments of the socionatural order and (2) a sociology of craft that objectivates the social constitution of the *skholè* as a specific mode of existential boundedness by addressing scholarly thought as differentiated social labor.

In my concluding remarks, I situate this reconstructive project in the context of the shift from the politics of truth to the politics of untruth/‘post-truth’, which offers postpositivists the challenge and opportunity to interrogate their ability to coherently inscribe a social defense of truth in a comprehensive understanding of its social nature and social conditions of possibility.

The Sociology of Knowledge as Epistemology: On the Tracks of a Derailed Revolution

Sociologists approach the problem of knowledge by interrogating the sociohistorical variability and contingency of all manifestations of thought, conceived as “cultural formations” (Mannheim 1982, 55) and treated as natural objects of reality (Bloor 1976). The objective of the sociology of knowledge is to identify and explain the social origins (ontogenesis), conditions of possibility, and processes of (re)production of our collective representations—(systems of) ideas, forms of thought, and modes of thinking.

The first part of this article explains why the division of labor between (the) sociology (of knowledge) and (the) philosophy (of knowledge/science) is untenable, by showing (1) that the investigation of the social determination of knowledge² in effect reappropriates the philosophical problem of consciousness and of the origins of the forms and categories of the understanding and (2) consequently, that a coherent, full deployment of the sociology of knowledge necessarily leads to a reconstruction of epistemology along postphilosophical lines.

To properly delineate and efficiently pursue such a project, however, requires to first understand how such a reconstruction failed to occur in IR and what self-imposed obstacles need to be removed for its achievement.

The Social-Determination Thesis in Eclipse and the Taming of Sociological Reason

The derailing of the radical inquiry into the social determination of knowledge started soon after the official establishment of the sociology of knowledge (as *Wissenssoziologie*) in Germany in the 1920s (Scheler 1980; Mannheim 1936) and unofficially in France (as *sociologie de la connaissance*) a couple decades earlier (Durkheim 1960; Durkheim and Mauss [1963] 1970). While even Robert Merton recognized the foundational character of this problem for a proper sociology of knowledge, his own contribution to the establishment and consolidation of the sociology of science, as a discipline focused on the institutional factors governing scientific organization and activity, led to the steady disappearance of the social-determination concern until the constructionist turn in American social science. By the time this turn occurred, the sociology of knowledge had been relegated to a marginal space, delineated (i.e., excluded), on the one hand, by the philosophical-normative investigation of “justified true belief” that constituted

²Social determination doesn’t imply or entail sociological determinism. The social determination of knowledge points to those origins of knowledge that are social, not to the idea that knowledge is exclusively socially determined.

the domain of classical-analytical epistemology (Fogelin 1994), and on the other, by the sociological investigation of “certified public knowledge” as pursued by the then-dominant sociology of science (Merton 1973).

The original concerns of the sociology of knowledge were thus narrowly and *residually* redefined in relation to what was excluded from the philosophical-epistemological investigation of truth *and* would justify a sociological approach, namely, false knowledge or opinion, associated with the theory of ideology broadly construed. Indeed, the consensus was that only false knowledge (i.e., *error*) needed any sociological explanation, whereas true knowledge required no grounding in social determinants, its validity being a sufficient explanation both of its occurrence and of correct beliefs about its truth-value.

The constructionist turn of the 1960s provided the impetus for the reemergence of the sociology of knowledge in the United States and the subsequent development of an anti-Mertonian sociology of scientific knowledge in the United Kingdom. Berger and Luckmann’s treatise ([1966] 1991), which introduced the idiom of the social construction of (social) reality through a synthesis of French (Durkheimian) and German (Weberian) sociological traditions, had a profound impact on the redefinition and subsequent trajectory of the field in Anglo-American sociology. Indeed, it offered an explanatory framework that included social determination as part of the coconstitution of subject and object, by reinstating the origins of human representations as central to the investigation of social being and behavior.

However, this American intervention differed in two important ways from the original European project. First, it focused on everyday knowledge without a specific concern for scholarly knowledge. The then-dominant sociology of *science*, on the other hand, being exclusively interested in the hard and technical sciences, this left social-scientific and philosophical knowledge in an ontological vacuum that contrasted with its centrality for the original sociology of knowledge. Indeed, the latter had envisaged itself as one instance of its object of study and was therefore conceived as an intrinsically reflexivist program that could (and did) speak of its own social determination (Mannheim [1936] 2000a).

Second, the realm of reference for the social-determination thesis, namely, the social, was now defined in cultural-institutional and ideational ways, leaving out of coconstitution a whole set of material (ecological, biological, and economic) and praxical³ determinants of knowledge that were originally central to the sociology of knowledge. This ideationalist shift was consequential on two related levels. At the theoretical level, the explanation of ideational phenomena by *other* ideational phenomena distorted the externalist parameters of the sociology of knowledge, thereby undermining its original, distinctive purpose, which is to explain the formation and workings of consciousness as a socially (i.e., exogenously) constituted product, not to map the interdependence of so-called inner products of consciousness in their social (external) manifestations. At the metaepistemological level, this shift inhibited the reconstructive potentialities of the sociological perspective, since there was no longer any reason to interrogate, let alone redefine, the standards of epistemology outside of those traditional idealist categories whose origins could be a priori located in the realm of mental (internal) processes mediated by, and intersubjectively agreed upon via, *other* so-called products of consciousness: logic and language.

Because social constructionism has affected all the social sciences, these related transformations have resulted in a taming of the sociological revolution across the board, (i.e., an erasure of its postphilosophical radicalism and self-acclaimed autonomy in matters of epistemology). Its failure to inform critical and reflexive scholarship is most strikingly illustrated by the fact that its most eloquent

³I use *praxical* to refer to praxis/practice rather than to either practicality or practicability, for which I reserve the term *practical*.

proponents—Marx (1978), Elias (1971a, b), Bourdieu (1983, 1990a), Bourdieu et al. (1968)—are among the most influential sociologists and social theorists of the last century. How is it, then, that while even today Marxian, Eliasian, and Bourdieusian sociologies thrive, especially within postpositivist (IR) circles, their passionate, even bellicose, anti-idealist/postphilosophical positions on epistemology are largely ignored?

The sociological revolution was deflated not so much by philosophers, who were taking stock of the philosophical crisis provoked by advances in historical and social-scientific inquiry, but by sociologists who accepted and reasserted the traditional division of labor between the two disciplines—and this is where the lessons for IR begin to unfold. The taming of sociological radicalism was mediated by such authoritative interventions as Giddens' (1984) *The Constitution of Society* and Berger and Luckmann's own *The Social Construction of Reality* (Berger and Luckmann [1966] 1991): two seminal texts of Anglo-American sociology and the two bibles of Anglo-American constructionism.

The earlier intervention sums up well the somewhat gratuitous reverence for philosophical inquiry and its "time-honoured intellectual territory" (Berger and Luckmann [1966] 1991, 13) (ontology and epistemology) characterizing the now-leading constructionist position—and to avoid any misunderstanding and outrage, it does so on the very first page of the book's introduction; with respect to questions about the ultimate status of reality and knowledge, the sociologist's intrusion is

likely to raise the eyebrows of the man in the street and even more likely to enrage the philosopher. It is, therefore, important that . . . we immediately disclaim any pretension to the effect that sociology has an answer to these ancient philosophical preoccupations. (Berger and Luckmann [1966] 1991, 13)

This was perhaps merely a cautious attempt by two Austrian-born scholars to preempt well-rehearsed attacks on the sociology of knowledge, in a country that had just started to engage European continental theories (many of which, like the Frankfurt School's, were opposed to the project anyway) and where German *Wissenssoziologie* had found no philosophical allies besides pragmatists who adopted a "genetic" approach to knowledge (Lavine 1950, 538). But regardless of original intentions, these self-imposed taboos on sociological thinking and critique prevailed, despite sociology's natural vocation to raise eyebrows precisely by challenging everyday commonsense and despite such taboos' nonsensical implications for other ancient questions that fall within the 'time-honoured intellectual territory' of, say, metaphysical or theological inquiry. Not only were sociologists refused the legitimacy to answer philosophical questions about knowledge and reality, the reverential posture also evaded the possibility that, as the *realities* of knowledge became illuminated sociologically and thereby made to recursively inform *problematizations* of knowledge and knowing, these ancient questions would be rendered—or shown to always have been—properly meaningless.

These two shifts operated by Anglo-American social constructionism—away from the critical inquiry into (social-)scientific and philosophical knowledge and toward an idealist ontology of the social—are an extension of the failure of nerve that David Bloor (1976) identified in Karl Mannheim's own self-imposed limitations on the types of knowledge whose truths *Wissenssoziologie* could (cultural sciences) and could not (physical and mathematical sciences, logic, epistemology) subject to sociological analysis. Both of these shifts—and, I suggest, a similar failure of nerve—have played out in IR's sociological turn via constructivism, but following two variants representing the diverging (Anglo-American vs. European) legacies of IR's constructivists.

The two variants, sometimes identified as conventional and critical versions of constructivism (Hopf 1998), are easily differentiated by the extent to which they allow the reflexivity of social actors, as *knowing* subjects, to have epistemological

implications for constructivism itself. In conventional constructivism, best represented by Alexander Wendt's (1999) work, just as in Giddens' (1984) and Berger and Luckmann's ([1966] 1991), the sociology of knowledge is adopted as the scholar's standpoint on other social actors' knowledge, but not her own. The influential development of this peculiar version of the sociological turn prompted the affirmation of a critical constructivism that took a more coherent position on knowledge. In Stefano Guzzini's (2000, 149) equally influential intervention, taking the sociological turn seriously entails problematizing "the relationship between the social world and the social construction of meaning (including [scholarly] knowledge)."

However, critical constructivism has so far limited the scope of this problematization in two significant ways. First, while coherently addressing the implications of the social construction of meaning for our understanding of *theory* and its *conceptual* elements conceived as intersubjective phenomena of the social world, it has not extended this same posture to *epistemology* and *philosophy*, which presumably belong to the same class of ideational phenomena whose meaning is socially (intersubjectively) constructed. The failure to logically and critically take this one simple, additional step and carry the constructionist agenda empirically all the way up has perhaps single-handedly delayed the formulation of a coherent post-foundationalist philosophy in IR. Second, the conceptualization of the social in the two terms of the relationship—the social world and the social construction of meaning—is very clearly exclusive of material structures and processes (inanimate, biological, ecological, and economic) that provide the *stuff* and the *conditions of possibility* of social structures and processes, and thereby enable and mediate social construction.

The final result is a social constructionism that doesn't trickle its epistemology either up or down and leaves the upper branches of the social as unexplored as its deep roots. In complete opposition to the transgressive attitude of the original sociology of knowledge, critical constructivism rather appears as the product of a self-limiting boundary work that keeps sociological critique gently within the (socially constructed) borders separating it from the sovereign realms of philosophy and the noncultural sciences, and reproduces a (socially constructed) idealism that it denies itself the means of critically interrogating.

The clearest illustration of critical constructivism's softening of the sociology of knowledge is that it renders the latter barely distinguishable from alternative sociohistorical perspectives that now inform a growing contextualist agenda within IR (Roshchin 2014), such as Nietzschean-Foucauldian, Skinnerian, and Koselleckian inquiries into the formation of IR thought/theory and its driving concepts (compare Bartelson [1995], Armitage [2000], Jahn [2006], Guzzini [2013], Ashworth [2014], Berenskoetter [2016]). Simultaneously, the contagious sociologizing gaze of the sociological turn has brought the discipline's intellectual historians and historiographers so much closer to that soft sociology of knowledge that they should rightly be considered an integral part of that turn. While this has undoubtedly widened and enriched the conversation about IR, the radicalism of the sociological perspective—its distinctive theoretical-explanatory ambitions and its aspirations for philosophical autonomy—has now been diluted in this sea of weakly differentiated contextualizing discourse.

The second path that has paradoxically contributed to the further erasure of the radical-sociological perspective in IR is the growing science studies agenda. This agenda reflects the various influences of the sociology of science and, more recently, of science and technology studies (STS) as its heir and as the site of a reformulation of constructionism via laboratory studies. The first area of influence is manifested in IR scholars' straightforward appropriation of STS's *subject-matter* on the basis of its obvious importance in world politics (Mayer et al. 2014). The recent creation of a Science, Technology and Art in International Relations

(STAIR) section at the International Studies Association marks the institutionalization of this agenda, which is confidently growing away from abstract epistemological debates.

The second area of influence represents the reflexivist appeal of science studies insofar as they illuminate the realities of scholarly representations and practices for scholars themselves. Here, IR's appropriation of STS's *theories and methodologies* has required some extension of STS's object-domain. Indeed, STS's core focus on the hard and technical sciences (the founding case-studies being high-energy physics, molecular biology, and colloid chemistry) and its simultaneous translation of the social-constructionist interest in everyday knowledge into the everyday of laboratory life, have again left social-scientific and philosophical knowledge in an ontological vacuum. Even today, most sociological studies of that knowledge, such as the sociology of philosophy (Collins 1998), the sociology of sociology (Bourdieu 2001), the sociology of economics (Fourcade 2009), and the sociology of IR, are at most (if at all) informed by STS scholarship but essentially developed outside of STS.

In the case of IR, however (and as opposed to the sociology of sociology), this appropriation endorsed the same narrowing of sociological and reflexivist inquiry that occurred in STS, for which the facts about scholarly knowledge and practice have not triggered a redefinition of epistemology. The sociological research agenda that Ole Wæver proposed in his (Wæver 1998) article has now crystallized as a somewhat constructionist version of a Mertonian sociology of IR-as-science, only more nuanced, and speaking the languages of the post-third-debate era wherein criticality demands fluency in postpositivism and an engagement with gendered and (post)colonial realities (a synthesis best achieved to date in Tickner and Wæver [2009] and Tickner and Blaney [2012]). Beyond its acknowledgment of the critical canon, however, the sociology of IR is increasingly anchoring the sociological and reflexive turns in the study of *institutional* structures and processes (made explicit in Grenier [2015]) ranging from academic interactions to publications, curricula, and public engagement (Hagmann and Biersteker 2014; Kristensen 2015; Turton 2016; Grenier and Hagmann 2016; Alejandro forthcoming). Additionally, the sophisticated focus on scholars' practices underscoring this sociological project is explicitly promoted as a move *away* from IR's traditional, unproductive obsessions with epistemology (Bueger 2012).

Finally, STS's influence in IR is unlikely to mediate a future engagement with the bolder ambitions of the sociology of knowledge. STS theorists' move from social constructionism to the "co-production of nature and the social order" (Jasanoff [2004] 2006a), which manifests a "self-conscious desire to avoid both social and technoscientific determinism" (Jasanoff [2004] 2006b, 20), does not provide any clear delineation of the social determination of knowledge. Coproduction is understood in terms of "the ordering of nature through science and technology" and "the ordering of society through power and culture" (Jasanoff [2004] 2006b, 14; Miller [2004] 2006, 65). This has diluted, in theory and practice, the investigation of different modalities of the recursive ordering of culture (including knowledge and thought).

Indeed, a comprehensive account of the co-production of nature and culture would address the natural (physiological, ecological) conditions and determinants of knowledge and how social interaction and collective emotional and learning experiences in turn (re)shape the biological and genetic determinants of human cognition. A complete reflexivist theory of knowledge would therefore encompass natural/naturalized epistemology (Quine 1969) and social/socialized epistemology (Fuller 1988) conjointly. This article focuses exclusively on the latter approach, while providing (in part two) some illustration of how the sociology of knowledge can incorporate elements of natural epistemology through a study of the socially transformed ecologies of human perception and understanding.

The revival of the social-determination thesis is especially important because IR's dominant versions of social constructionism have by and large reduced the social to a free-floating realm of the ideational (language, norms, identity, etc.), and material factors are ignored as necessary determinants of epistemic categories and representations. Since this tendency extends to postpositivist approaches more generally, we are basically left with the tacit paradigmatic proposition according to which the ideational begets the ideational—ideas produce more ideas, language shapes meanings and perceptions, culture informs norms, etc. This, however, does not in any way explain why and how (any of these) ideational products are possible in the first place (the general formulation), or how macrotransformations in social organization and (re)production affect the frames through which social reality is intersubjectively rendered intelligible and meaningful (the specific formulation). And without such explanations being explicitly envisaged and systematically pursued, the sociology of knowledge is at best reduced to a mere sociologically inclined history of ideas.

Epistemology as Social Theory: Theorizing Social Determination

The sociological critique of philosophical epistemology began more than 150 years ago. Before presenting it here, it is useful to start with the soft version of the sociology of knowledge, which has had the greatest impact on Western scholarship and IR, namely, Karl Mannheim's⁴. Mannheim (1936, 56) defined *Wissenssoziologie* as the study of "total ideology" understood as the "total structure of the mind" of "an age or of a concrete historico-social group." The sociology of knowledge reflexively explains *itself* as the concretization of the historicist *Weltanschauung* ("global outlook of an epoch") (Mannheim [1936] 2000a, c), which reflects a maturation of the "unmasking turn of mind" that characterizes sociological thought (Mannheim [1936] 2000a, c). It originates in the realization that since "*Weltanschauungen* are not produced by thinking," they should be subjected to an objective and scientific, rather than idealist, inquiry (Mannheim [1936] 2000b, 37–38). This inquiry is part of a broader sociology of thought that entails "breaking through the immanence of thought—with an attempt to comprehend thought as a partial phenomenon within the broader field of existence, and to determine it, as it were, starting from existential data" (Mannheim [1936] 2000a, 138).

Mannheim's study of conservatism demonstrates how "thinking is bound to existence" (Mannheim 1986, 31), that is, how knowledge and thought are (1) existentially bound (*seinsgebunden*) to the entire context of *social production* and socialization that determines their possibility, meaning, and truth-value and (2) existentially connected (*seinsverbunden*) to specific social groups whose distinctiveness arises out of *social differentiation*. As opposed to Mannheim, radical sociologists deployed this analysis to include all types of knowledge and thought, tracking one or both of these two pathways of social determination in their furthest and most material extensions. This deployment entailed an explicit confrontation with philosophy, manifesting the self-conscious evolution of sociological thought following Auguste Comte's "positive" revolution.

The Marxian-Engelsian critique of German idealism is one of the earliest formulations of the radical position. In *The German Ideology*, Marx and Engels illustrate the posture exemplified by their historical method in presenting the contents and forms of human consciousness as products in and of the processes of human material existence, defining *ideology* as a socially produced distortion of our perception of reality:

⁴Especially the influence of *Ideology and Utopia* on Carr, who "twisted its rhetorical structure almost out of recognition" (Jones 1997, 236) and Morgenthau.

Men are the producers of their conceptions, ideas, etc.—real, active men, as they are conditioned by a definite development of their productive forces and of the intercourse corresponding to these, up to its furthest forms. Consciousness can never be anything else than conscious existence, and the existence of men is their actual life-process. If in all ideology men and their circumstances appear upside-down as in a *camera obscura*, this phenomenon arises just as much from their historical life-process as the inversion of objects on the retina does from their physical life-process ... (Marx and Engels 1978, 154)

While “consciousness is therefore from the very beginning a social product, and remains so as long as men exist at all” (Marx and Engels 1978, 158), what lends socioepistemic power and credence to ideology is that the forms and modes of thinking through which ideas are posited as independently real, and consciousness as autonomous from social life-processes, are themselves the (ideological) product of material existence, emerging when the division of social labor takes its ultimate form, that is, once manual and mental labor become separated in the process of *production*:

From this moment onwards consciousness *can* really flatter itself that it is something other than consciousness of existing practice, that it *really* represents something without representing something real; from now on consciousness is in a position to emancipate itself from the world and to proceed to the formation of “pure” theory, theology, philosophy, ethics, etc. (Marx and Engels 1978, 159).

In Marx’s critique of Hegel’s philosophy of law, and beyond it, of all products of mental labor, the materialist posture is crystallized in the now-paradigmatic thesis according to which the “mode of production of material life conditions the social, political, and intellectual life process in general” and hence that “[i]t is not the consciousness of men that determines their being, but on the contrary their social being that determines their consciousness” (Marx 1978, 4).

The original excerpts were worth reproducing here to remind the reader that the Marxian critique of ideology applies to the *entire* process and phenomenon of ideation. Its implications for *epistemology* are best captured by the analysis of the origins of abstract and conceptual thought, as delineated by George Thomson ([1955] 1977) in *The First Philosophers* and pursued by Alfred Sohn-Rethel (1978) in his *Intellectual and Manual Labour: A Critique of Epistemology*.

Thomson ([1955] 1977, 300) noted that

[a]s we pass from Thales to Anaximander and Anaximenes, from the Milesians to Pythagoras and Herakleitos and finally to Parmenides, we find the concept of matter becoming progressively less qualitative and concrete, until Parmenides confronts us with a pure abstraction, timeless and absolute.

Remarking that “the society in which these philosophers lived and worked was characterized by the rapid growth of a monetary economy,” Thomson proposed that “[t]he Parmenidean One, together with the later idea of ‘substance,’ may therefore be described as a reflex or projection of the substance of exchange value” (Thomson [1955] 1977, 300, 301).

Sohn-Rethel (1978, [1961] 2010) systematically explored this hypothesis with respect to the history of philosophy up to Kant and the birth of modern science. Drawing on Marx’s analysis of commodity fetishism, Sohn-Rethel replaced Marx’s concepts of use-value and exchange-value with those of use-activity and exchange-activity. In commodity production and circulation, the two types of activity (i.e., *practice*) are separated in time and space, the marketplace being a transitory realm between production and use wherein the exchange-value of commodities takes precedence over their use-value. Once commodities are no longer exchanged for one another through barter but via a universal equivalent (money), abstraction becomes a defining component of men’s *social relations*. In causally connecting the birth of abstract thought to that of exchange-abstraction and the emergence

of the concept of movement in Galilean Physics to the movement of monetary circulation, Sohn-Rethel illustrates how it is in humans' practice, not in their thought, that theoretical forms and categories originate:

[O]ur concepts ... are not properties of things that ... we would read in them. Quite the contrary, the conceptual apparatus that we apply to things is part of us, but this 'part of us' is to be understood in both a social and historical sense; it is not individual, and it does not come from nature ... [T]hese pure concepts ... are related to the conscious elimination of society in the act of thinking ... they are ... that which remains once one has completely abstracted the social (Sohn-Rethel [1961] 2010, 40)⁵.

The conclusion that idealist-philosophical epistemology is the product of a social process whereby the social nature and externality of consciousness are made invisible to consciousness was also established in Emile Durkheim and Marcel Mauss's functionalist analysis of collective representations. Their 1903 study of primitive forms of classification (Durkheim and Mauss [1963] 1970) laid the ground for a realist understanding of the social origins and constitution of philosophical categories such as time and space. These were shown to result from the ordering of the world that is produced in the course of a social group's interaction with nature and the organization of its physical environment and everyday activity.

Crucially, in Durkheim's (1960) study of the elementary forms of religious life, based on ethnographies of totemic Australian societies, the philosophers' category of category is itself appropriated sociologically and subjected to a naturalist analysis. By illuminating the logic and process according to which humans, animals, and inanimate objects are brought together into totemic groups, Durkheim shows that while the act of classifying implies the human *faculty* to classify, (i.e., establish relations of resemblances and identity among things), the *principle* according to which these associations are made is completely external to consciousness; it is the social organization of the group that provides the model for a conceptual ordered grouping wherein items are placed in a relation of parenthood *vis-à-vis* one another (Durkheim 1960, 200–22). Durkheim's analysis thus demonstrates the determining role of social organization and practice in the emergence and sociomental fixation of intersubjective epistemic categories within society and in each of its members' mind.

Durkheim's study further demonstrates "how the most diverse techniques and practices (law, morality, arts) and those that serve material life (sciences of nature, industrial techniques) are, directly or indirectly" derived from religious practice and thought and inherit its original forms (Durkheim 1960, 319–20). The metaepistemological implications of the erasure of this genealogy in the constitution of philosophical and (social-)scientific thought are most strikingly illustrated in his analysis of the concepts of force (and by extension, power) (Durkheim 1960, 268–292) and causality (Durkheim 1960, 501–28)—another a priori category of Kantian philosophy—whose origins are identified, respectively, in the magical representations of totemism and in the practices of mimetic (or imitative) totemic rituals.

The radical sociological position finds another powerful formulation in Max Scheler's phenomenological contribution, which is the first explicit demarcation of the sociology of knowledge as an autonomous discipline, and the first systematic, comprehensive sociological treatment of the problem of knowledge. The sociology of knowledge is here again asserted against philosophy's idealism (Scheler 1980, 38), being conceived as the investigation of the "temporal coming-to-be" of "ideal factors" that constitute the domain of culture (religion, metaphysics, science, art, and law) on the basis of the "relationships and forms" of "real factors"

⁵Quotes from French sources are translations by the author throughout.

of social life, the most important of which are the economy, power, and reproduction (Scheler 1980, 36).

It is impossible to capture the extraordinary sophistication, vision, and scope of Scheler's enterprise in a few paragraphs, but its core propositions are clear enough for the purpose at hand. For Scheler, different types of knowledge have different origins and are carried by different social groups and their associated ethos. They are all constituted by the effects of diverse material causes, starting from *natural* factors associated with a universal "innate drive impulse" to "construct and play" that is released by "[e]verything unfamiliar . . . that disrupts the context of immediate, interconnected anticipations" (Scheler 1980, 77). Two layers of *social* factors explain the differentiation of epistemic standpoints and their constitutive intellectual orientations. These factors are related to humans' interaction with their environment and to their socioeconomic organization.

Scheler assigns the most significant impact of socioecological factors on the differentiated cultural evolution of metaphysics, wherein differences in perspectives reflect different existential immersions in the world, which produce specific conceptions of the self and of how self and world are related to each other. Whereas "*Asian Indian* metaphysics is one of 'forests' . . . one of immediate contact with *nature*, of identification with and immersion of the soul in life, . . . by contrast almost the entire metaphysics of the *West* is a product of *city* thinking." While the former thereby produces an "almost metaphysical-democratic conscious unity of man with all subhuman life," the latter translates as a consciousness wherein man views himself as "a *sovereign* being *above* all of *nature*" (Scheler 1980, 98). It is within such metaphysical schisms that socioeconomic factors operate as a third source of external determination, explaining differences in content and form among Western philosophies (French, British, and German) as deriving from the characteristics and ethos of the social groups that produced them (respectively, the "enlightened nobility," the "larger bourgeoisie . . . [of] statesmen and economists," and "the learned Protestant middleclass") (Scheler 1980, 98–99).

But social determination operates along different pathways that reflect the social differentiation of mental and manual labor. The social determination of philosophy is mediated by "the work of learned people of the upper classes who have the leisure to contemplate essences and to devote themselves to their own 'cultivation'" (Scheler 1980, 100). While this existential distance from the material processes of social life is necessary and sufficient for the development of metaphysical knowledge, it cannot, however, account for the emergence of positive knowledge, whose "basic sociological origins" are "always *economic communities of work and commerce*." Science originates in the ethos of those whose immersion in the life-process shapes their consciousness and inner drive in the direction of an "intensive *interest* in those images of and thought about nature that make possible the *prediction* of natural processes and *control* over them." This is the "class of people who have accumulated experience in work and crafts," and without whose praxis "science never would have found its essential and close connection with *technology*, measurement, and, later on, free *experiment*" (Scheler 1980, 100).

Insofar as science is the meeting of theoretical and practical knowledge, it is always and everywhere "the child of the marriage between philosophy and work-experience" (Scheler 1980, 100–01). But against the learned classes' idealist epistemology, the sociology of knowledge illuminates the praxical nature and becoming of science:

technology is not a subsequent "application" of a theoretical, contemplative science characterized by the idea of truth, observation, conservation, pure logic, and mathematics; rather, the more or less prevailing will to control and direct this or that realm of existence (gods, souls, society, organic and inorganic nature) co-determines the methods of thought and intuition, as well as the goals of scientific

thought, and, indeed, it co-determines as though behind the back of the consciousness of individuals, whose changing motivations for investigation do not matter in this process. (Scheler 1980, 101).

In Pierre Bourdieu's constructivist structuralism or structuralist constructivism (Bourdieu 1989) the sociohistorical differentiation of social labor and the consequent social constitution of theoretical thought are further specified as being mediated and consecrated by the constitution of a social group whose worldview is shaped by a specific mode of existential boundedness—the *skholè*—that is exemplified, (re)produced, and legitimated through a socially organized and institutionally validated collective practice, intersubjectively experienced as a distinctive vocation and ethos:

The scholastic view is a very peculiar point of view [on the world] . . . that is made possible by the situation of *skholè*, of leisure, of which the school . . . is a particular form, as an institutionalized situation of studious leisure. Adopting this scholastic point of view is the admission fee, the custom right tacitly demanded by all scholarly fields . . . (Bourdieu 1990a, 381).

Insofar as what “those whose profession it is to think and/or speak about the world have the most chance of overlooking are the social presuppositions that are inscribed in the scholastic point of view,” reflexivity entails interrogating the social conditions of possibility of this collective standpoint and “the unconscious dispositions, productive of unconscious theses, which are acquired through an academic or scholastic experience, often inscribed in prolongation of an originary (bourgeois) experience of distance from the world and from the urgency of necessity” (Bourdieu 1990a, 381). Therefore—and as a final sociological explanation of the division of intellectual labor between sociology and philosophy—

[w]e must, by taking historicist reduction to its logical conclusion, seek the origins of reason not in a human “faculty,” that is, a *nature*, but in the very history of these peculiar social microcosms in which agents struggle, in the name of the universal, for the legitimate monopoly over the universal, and in the progressive institutionalization of a dialogical language which owes its seemingly intrinsic properties to the social conditions of its genesis and of its utilization. (Bourdieu 1990a, 389)

This overview of the radical sociological position brought out the centrality of social practices in the theorization of social determination. Before developing this position into an empirical research agenda that further explores the two pathways of social determination (social production and social differentiation) that constitute collective consciousness as dually existentially bounded (*seinsgebunden* and *seinsverbunden*), it is important to spell out its implications for a critique and reconstruction of epistemology in IR.

Implications for IR: Problematizing Knowledge before IR Theory, above the Philosophy of Science

If the sociology of knowledge necessarily disturbs the foundations of classical epistemology, it is because it naturally constitutes itself as an alternative perspective on the philosophical categories and universals. First, because, it does not take for granted the first assumptions through which philosophy operates as a prism (the clarifier role) or a foundation (the arbiter role) for all fields of inquiry. As Mannheim puts it, while

philosophy tends to ground itself upon a timeless and unchanging reason, or at least to presuppose the unchangeability of the formal determinants of reason (especially of the categories), the sociology of knowledge, as an empirical specialised science, is not allowed to accept such a postulate as binding upon itself. *These problems are questions for its factual inquiries* (Mannheim 1986, 33; italics added).

The implications of this statement were clear for Mannheim ([1936] 2000a) regardless of his shyness about them; as the sociology of knowledge pursues its project *empirically* and brings to light the social determination of the categories themselves, it simultaneously delineates an alternative epistemology—one which, as opposed to philosophical epistemology, is constituted from the bottom up and from the outside in.

Consequently, as Durkheim demonstrates, a sociological approach to collective representations brings philosophy itself into the object-domain of the sociology of knowledge. This is best exemplified with respect to the debate between philosophical empiricists and rationalists about the origins of the categories themselves—a debate that the sociological approach *resolves* by *explaining* its *occurrence* and the *dualism* of its form. To claim that the categories are the product of pure experience (empiricism) is to ignore their universality and necessity (i.e., the fact that one cannot willfully escape from them and reinvent them as one wishes). But to claim that they are innate and external to all experience (rationalism) is to place them outside of objective reality; the concept of a universal reason really does not answer the question about the *origins* of these categories or account for their *variability* across time. It is, rather, their social character that explains their necessity and hence their objectivity as grounded in “the [social] nature of things” (Durkheim 1960, 23–24).

The sociological perspective thus highlights the fact that by separating “the product of thinking” from its “sociological genesis” and consequently anchoring epistemology in “the level of immanent entities” (Mannheim 1986, 31) the idealist-philosophical approach merely confuses ontological objectivity with timelessness (Mannheim 1982, 74) and thereby completely misses the nature, origins, and *causes* of objectivity. If the categories are both universal *and* contingent, it is because they are—exactly, no more, no less—*sociohistorically objective*. This, IR scholars of a postpositivist persuasion have accepted as a reasonable proposition with respect to theories and statements about the world, but somehow the implications of the principles of social-constructedness and historicity have never sufficiently trickled up to affect the philosophical frameworks that in turn govern IR’s metatheoretical discussions.

The more profound implications for IR, then, concern the ontological and epistemological universals that anchor our authority to speak about the world: those pertaining to the world’s existence and nature and to our modes of knowing it. These include but *precede* any discussions and debates we might have about the international or whatever constitutes our subject-matter. In other words, the problem of knowledge cannot be addressed (e.g., see EJIR 2013) at the level of (better) IR *theories* or in the intertextual spaces of their agreements or oppositions, because the social determinants of thought have already affected the frameworks through which theories are constituted, rendered meaningful, *and* debated. It is therefore not merely insufficient, but actually counterproductive, to mobilize the sociology of knowledge for an epistemological reconstruction of IR theories and concepts (Guzzini 2000) without first deploying it for a metaepistemological reconstruction of epistemology itself. And it is in this sense that the sociological turn carried by critical constructivism has a paradoxical sabotaging effect despite its reflexive purpose and character.

Nor, then, can the problem be addressed (e.g., see Jackson 2011), even less so resolved, within/through the *philosophy of science*, until the social determinants of its categories and validating standards have been rigorously exposed and critically interrogated, so they can become truly meaningful and useful as sociocognitive instruments. But this, of course, would produce a very different philosophy for IR than the one we’ve been following for a century now: a new philosophy manifesting and translating the historical (i.e., cumulative *and* self-corrective) progression

of sociological reason, that is, the philosophy of a non-self-deceiving autonomy suited to a properly post-Kantian consciousness.

To sum up, the superiority of the sociological position lies in its ability to engage the problem of knowledge at the metaphilosophical level and thereby coherently reconcile objectivity and historicity, by *explaining the appearances of universality as manifestations of the contingently objectivizing effect of social determination*. Crucially, it also identifies the *social process* whereby such appearances gain the socioepistemological credibility of their objectivity, namely, *the praxically mediated social constitution of theoretical thought*. This is the central thread running through the perspectives presented above, and it is by exploring it systematically and empirically that we can achieve a reconstruction of epistemology in IR.

The second part of this article accordingly moves on to an elaboration of the requisites for such a reconstruction. The question of IR's categories is here addressed in the terms that befit a metaepistemological inquiry concerned, not with specific theories and objects, but with the modes and frames of knowing that mediate and enable scholarly knowledge and its distinctive standpoint on the world.

Practice as Mediation and Site of the Social: Outline for a Praxiographic Investigation of Scholarly Thought

As shown earlier, practice emerges as the social phenomenon wherein the theoretical and ontological concerns of the social-determination thesis converge and crystallize, thereby delineating a path for a further exploration of that thesis. Conceptually practice connects, and simultaneously transcends the dichotomies of, the external and the internal, the social and the individual, and the material and the ideational. It can thus be understood as that which *mediates* between the socionatural order and human consciousness. Consequently and methodologically, practice can be treated as the *site* of the social in the individual and hence provides an anchoring for actual empirical research, that is, for a praxiography specifically (Mol 2002; Bueger 2014).

However, *contra* the dominant orientation in the sociology of IR, the sociological study of collective consciousness presented above indicates that scientific and academic practices are not the only or most relevant social practices to explore, even for the investigation of philosophical and social-scientific knowledge. The following sections propose a more adequate and comprehensive approach that reflects a deeper engagement with the metaepistemological significance of praxeology.

Praxeology

Keeping in mind the various ways that praxis and practice(s) are conceptualized (Bueger and Gadinger 2014; Kustermans 2016), this section outlines core tenets of the praxeological approach that are directly relevant to the problem at hand and that open up a different space for the practice turn. While some pioneers of this turn in IR explicitly envisage it as a move away from epistemology to practice (Bueger 2012)—thereby enabling the sociological turn as the saboteur of the sociological revolution—my argument is that praxeology is actually a means for *redefining* epistemology sociologically and that it is the most efficient (and potentially the only) means for doing so in an empirically conclusive manner.

This different take on praxeology implies a reversal of the relation between knowledge and practice; instead of practices being merely conceived as manifestations that “embody, act out, and possibly reify background knowledge and discourse in and on the material world” (Adler and Pouliot 2011, 4), they are here (also, but mainly) understood as manifestations that embody and mediate the

expression of the material world in and through the actualization of knowledge. Within this framing, praxeology carries distinctive positions that are especially relevant to an epistemography of IR.

First, practice theorists endorse a materialism that focuses on the body as “the meeting point both of mind and activity and of individual activity and social manifold” (Schatzki 2001, 8). This reverses the idealism of classical epistemology:

This prioritization of practices over mind brings with it a transformed conception of knowledge . . . [K]nowledge (and truth) are no longer automatically self-transparent possessions of minds. Rather, knowledge and truth, including the scientific versions, are mediated both by interactions between people and by arrangements in the world . . . Scientific and other knowledges also no longer amount to stockpiled representations. Not only do practical understandings, ways of proceeding, and even setups of the material environment represent forms of knowledge—propositional knowledge presupposes and depends on them. (Schatzki 2001, 12)

Second, this entails acknowledging the two performative dimensions of practice. Practice should not only be conceived as a more or less passive performance of collective representations that offers the observer an insight into individuals’ immersion in the social order to whose structural reproduction they contribute. It should be understood simultaneously as the medium of an active response to macrostructural processes of social life and the locus of a microresistance to social structures and dynamics of order, discipline, and control (de Certeau [1980] 1990). A nonindividualist investigation of individuals’ practices can therefore capture, in their reproductive *and* subversive dimensions, the overall social dynamics of collective order-(re)making.

Praxiography offers an insight into these social dynamics that is unmediated and hence unobstructed by the layers of *meaning* we constantly produce in our intellectual and moral engagement with the social order and that render our objective grounding in it more opaque to the observer. A praxiographic investigation of social determination therefore provides a fruitful alternative to the contextual-discursive analysis—as practiced by historians of ideas—of such hyperdisciplined and overly constructed material as scholarly *texts*. It thereby constitutes an apt application of Mannheim’s ([1936] 2000b, 38–39) principle for the unmasking of *Weltanschauungen*, since it avoids the trap of starting from their “most remote manifestations” (i.e., the forms wherein they are already theorized and overrationalized, and hence most masked).

With these points in mind, each of the following sections explores one of the two pathways of social determination identified by social-determination theorists, with a view of formulating an empirical research agenda for a reconstruction of epistemology driven by a sociology of knowledge of a revolutionary persuasion. In each section, I develop my position against the backdrop of dominant praxeological and philosophical perspectives to make explicit the shifts it entails.

From Laboratory Life to Everyday Life

The epistemological tenets of social constructionism and the methodological tenets of praxiography emerged, as intrinsically coconstitutive, out of laboratory studies (Latour and Woolgar 1979; Knorr-Cetina 1981; Zenzen and Restivo 1982; Lynch 1985; Traweek 1988). Laboratory studies operated a series of interrelated, salutary moves *vis-à-vis* classical history and philosophy of science: from an abstract universal model of *science* to the realities of actual, evolving *sciences*; from historical, stock-taking analyses of “established knowledge” and “already-made science” to contemporaneous studies of “unfinished knowledge” and “science in action”; from the normative evaluation of scientific propositions via a priori standards of truth and validity to the investigation of the social formation of these

standards *in* scientific activity; and consequently, from a focus on the context of justification to a focus on the context of discovery and the actual relations between them. The laboratory provided a temporal and spatial *localization* for which ethnographic observation became *the* method to investigate “the construction of knowledge” and subsequently “the construction of the machineries of knowledge construction” (Knorr-Cetina 1999, 3). From there, historical analysis was reintroduced by extending the ethnographic method from the unmediated observation of contemporaneous scientific activity to the reconstitution of past socioscientific processes of truth-making (Shapin and Schaffer 1985).

Although laboratory studies have originally been applied to the (experimental) hard sciences, there are no fundamental restrictions on their extension to the social sciences and humanities. This merely requires adapting localization to the physical, relational, institutional, and discursive spaces wherein scholarly practices are conducted and enacted—the field, the office, the classroom, the conference, the home, as well as loci of debate, controversy, and myth-making, or the sites where authority, recognition, and discipline are performed. The tradition of scholars writing about their practices autobiographically or drawing on them to advise on the craft of intellectual and academic life (Mills [1959] 2000, Becker [1986] 2007, Wildavsky [1993] 2010) is merely an informal, undertheorized version of such a laboratory approach to our most consciously (individually) performed practices. Today it has become theorized and extended to a range of collective ones (Friese 2001; Lamont 2009). This illustrates the perfect feasibility and pertinence of laboratory studies for IR.

What requires consideration, however, is the kind of practices that need to be investigated *if* the objective is to capture not merely what scholars do that underscores the construction of facts and truths, but the very categories of thought that make such knowledge possible and affect its contents, forms, and credibility. While laboratory studies do consider the connections that extend the laboratory’s realm of practice into its social environment, they are fundamentally interested in science and science-relevant practices, and localization is conceived in terms that serve that specific purpose. This focal center makes them distinctive *qua* praxiographies *of science*, which enables comparisons with other, similarly conceived communities of practice (diplomats, Nongovernmental organizations workers, etc.).

My argument, then, is that against the dominant approach inspired by laboratory studies, the sociology of knowledge *qua* alternative *epistemology* requires an expansion toward those social practices that are not specifically scientific or academic. This follows naturally from the conception that scholarly knowledge is a subspecies of human culture, that is also embedded in, and carried by, other subspecies of culture, and that the social determination at work in the production of cultural categories is best understood by examining those social structures, processes, and practices that precede, enable, and mediate scholars’ socialization into scholarly thought and practice proper. The first step required to advance a praxiographic investigation of the social-determination thesis is therefore a move from laboratory life to everyday life that, *contra* Berger and Luckmann ([1966] 1991), refocuses attention on *scholarly* knowledges.

The study of everyday life is a well-established cross-disciplinary research program that already informs analyses of international politics and practices (Guillaume 2011; Acuto 2014; Davies and Niemann 2017). It has, however, not yet affected the investigation of IR itself, occupying at best an informal discursive space in IR scholars’ private conversations and autobiographical accounts. My purpose is not to systematize or generalize such anecdotal insights as they pertain to IR as a profession, but rather to elevate the issue to the metaepistemological problem concerning the mental patterns, categories, and ontologies that frame IR knowledge itself. The next step, then, is to identify those everyday practices that carry the mediation of the social order into collective consciousness. This

reflects a choice of explanatory variables for the investigation of the social-determination thesis, and the following discussion cannot be exhaustive of all variables and hypotheses. It focuses specifically on how scholars' immersion in more or less, and differently, carpentered environments shapes their epistemic imagination and relation to the world (*Seinsgebundenheit*).

The notion of a carpentered world originates in anthropological and psychological research on ethno-cultural differences in human perception. Positive empirical testing of this hypothesis suggests that people in different cultures are differentially susceptible to such pictorial representations as geometric illusions "because they have learned different, but always ecologically valid, visual inference habits" (Segall et al. 1966). For a historicist, historical-materialist, functionalist, phenomenological, or structuralist-constructivist approach, this is of significant importance in highlighting the impact of social structures and organization on the constitution of the categories of ordinary and scientific understanding, since it refers to the differentiated evolution of *socially* transformed landscapes in more or less urbanized, industrialized societies.

In his phenomenological-hermeneutic study of space perception, Patrick Heelan (1983) specifically shows how such an evolution in the material culture and artifacts of European society was a precondition for the internalization and normalization of the Cartesian/Euclidean organization of visual space that was central to the subsequent establishment and legitimation of the modern scientific perspective. The carpentered environment we create in the process of social existence practically mediates our perception of the world (our ontology) and is hence constitutive of (the validity of) our knowledge of it (our epistemology).

Insofar as it pertains to the macro-organization of social space and the social transformation of our ecologically mediated perception of the world, the carpentered environment is especially relevant to the further exploration of theses concerning variations in patterns and modes of thought along the spectral differentiation of forms of social organization or modes of (re)production, and of their respective world-forms—urban/rural, agricultural/industrial/postindustrial, sedentary/nomadic, etc. Studies of everyday spatial practices in the modern city, for example, explore how its man-made spaces, structures, dimensionalities, and grids create specific perspectives, rhythms, and modes of engagement with the world, observable in a range of visual, discursive, and kinetic practices of everyday life and their associated representations, texts, and technologies.

The paradigm of vision that dominates Western modern science can thus be interpreted in relation to the constitution of our cognitive frames of seeing as shaped by the spatial parameters of the modern urban landscape; the "god trick" of ultimate vision that underscores science's claim to objectivity (Haraway 1988) is merely an anticipatory celebration of the fulfillment of the Icarian phantasm, now fully experienced from the top of metropolises' elevated megastructures (de Certeau [1980] 1990, chap. 7), and from the flying machines that connect them through the open, gridded skies that have replaced the metaphorical seat of the godly perspective.

Such analyses call for systematic comparisons of how frames of seeing vary in differently configured—that is, differently carpentered⁶—spaces, both urban and rural; for example, see Bourdieu's ethnography of the Kabyle house (Bourdieu [1972] 2000, chap. 2). How, for example, does the urban environment—with its Euclidean spatial organization, patterned movements along rigidified grids of

⁶I abstract the notion of *carpentry* from its wooden materiality (in terms of substance and the specific forms/structures this substance enables) and use it as a general metaphor for the architectural configurations of our environments (both natural and man-made). Consequently, *carpentered environments* encompass all worlds, not only *carpentered worlds* as defined by Segall et al. 1966. This shifts the analytical focus to how environments are *differently* configured, and the *effects* thereof.

linear streets, strategically positioned traffic lights, symmetrical staircases of equally elevated steps, webs of connective metro lines, and excessively anthropic and technical-material aesthetics—affect our frames of seeing and knowing differently than do rural environments or the (hyperbolically organized) natural ones? How do these different ecologies and their spatial carpentries shape one's epistemic imagination (i.e., the patterns, objects, and pathways of our thought-processes)?

A comparative praxiography of knowledge produced within *global* IR would consider how the way we existentially and praxically inhabit differently carpentered environments along the spectrum of populated socioecological landscapes affects our theoretical, metatheoretical, praxical, and practical engagement with our objects of study, from the international and the global to our conceptions of order, territory, space, and borders, but also what shapes epistemic dispositions and preferences for patterns and regularities, analytical or normative thinking, closed systems, anthropocentrism, modeling, *longue-durée* perspectives, processual and structural explanations, or a focus on agents rather than forces.

This angle creates a very different contextualization of IR knowledge than either the geoeconomic one informed by postcolonial realities and ethno-cultural differences between and within core and periphery scholarship, or the sociohistorically informed comparative genealogies of classical and contemporary discourses on the world that contextualizes them in relation to the *Zeitgeist*, institutions, and problem-constellations of their time and place. Indeed, an engagement with, say, classical Chinese and Greek, or medieval and Enlightenment European political thought should take into account transformations in the larger, material-ecological structuration of consciousness and theoretical thinking that such genealogies ignore or assume to be unchanging.

This approach, however, can be more systematically and comprehensively investigated if the notion of a carpentered environment is made relevant to other categories beside space (i.e., expanded to the full carpentry of everyday life). This includes the rhythms and motifs (routinized or open-ended) of private and public *time* and their technologies and practices (clocks, schedules, and calendars; time-keeping and timekeeping; and rituals of memorialization and commemoration). As in the spatially carpentered environment, everyday practices in the temporally carpentered environment mediate ordinary and scientific understandings of the world, via such notions as natural recurrence and reproduction (cyclical time) versus rational progress and technical growth (linear time) (Lefebvre [2002] 2008, 231–32), and their *tempus* are a defining component of our social life-processes (Rosa 2013). They thereby also contribute to normalizing the political order, whose authority and symbolic violence operate through the constructed naturalness of temporal practices and representations and the hiddenness of their life-regulating and consciousness-shaping/taming function (Bourdieu 2012).

Of the other epistemologically relevant elements that compose the carpentry of everyday life—such as the *auditory* (Ihde [1976] 2007) or *chromatic* realms—the way the world is populated and its various (human and nonhuman, organic and nonorganic) populations connected is another important variable to consider. Such a focus includes classical sociological concerns for the effects of *interhuman* interaction as well as explorations of how our epistemic relation to the social and natural order is mediated and shaped by our interaction with *technology* and *technologies* of everyday and scientific activity (Rosenberger and Verbeek 2015).

These should be utilized in pursuing explanations of the emergence, evolution, and (de)stabilization of our ontologies as well as of our theoretical categories and instruments, such as the gradual depersonalization of the concept of causality that accompanied the move from animal-aided human labor to mechanized technologies of production (Childe 1949, 22) or its grounding in the exchange interactions of the marketplace (Sohn-Rethel 1978, 54–56). By properly illuminating

the *social* processes governing the *mental* processes of *abstraction* and *ideation* wherein philosophical categories and concepts originate, this approach would suggest very different starting points for IR scholars' recurrent discussions of such issues as causation, wherein epistemological differences among schools of thought often distract from the metaepistemological consensus that unites them (e.g., most recently, the Journal of International Relations and Development (JIRD) special issue on causation [Humphreys 2016]).

This line of inquiry also intersects with a core theme in the sociology of knowledge, namely, the way distance and abstraction from the materiality of life institute theoretical and scholarly thinking as an alienated practice whose nature and grounding in social life-processes are masked to one's immediate self-understanding. A praxiographic exploration of scholars' immersion in environments characterized by different carpentries along a materiality-abstraction spectrum would help us determine how different praxical engagements with different world-forms shape the ontological and epistemological parameters of our scholarly worldview.

However, only a comparison with the ontologies and epistemologies of *other social groups* can tell us what specifically distinguishes the *skholè* from other socially differentiated modes of engagement with, and immersion in, the world (*Seinsverbundenheit*). I propose that such an inquiry into the second pathway of social determination is best pursued by approaching IR knowledge as *differentiated social labor*.

Scholarly Thought as Social Labor: IR Epistemography Through a Sociology of Craft

To consider knowledge and thought as kinds of social practice is to problematize a series of classical philosophical distinctions and dichotomies, from Aristotle's (2004) categories of *theoria*, *poiesis*, and *praxis* to Arendt's ([1958]1998) opposition between the *vita contemplativa* and the *vita activa*. It further entails problematizing the second-level distinctions along which knowledge/thought and practice are themselves subdivided on the basis of how theoretical or praxical/practical they, their means, or their ends are (e.g., the classical-Greek division of epistemic thought into *logos*, *mythos*, and *metis*, or the Arendtian division of *praxis* into labor, work, and action, itself based on the distinction between *animal laborans* and *homo faber*).

To endorse these a priori philosophical categories as a starting point for a naturalist investigation of scholarly knowledge as a type of social labor is to negate the inquiry before it has even started. But to ignore them altogether is to fail to interrogate and explain their socioepistemic authority. The distinctiveness of a reflexive epistemology is indeed its ability to comprehend not only the origins of its own categories, but also what it means for theoretical thought to erase the possibility of interrogating the conditions of their possibility and credibility because it has erased the memory of its erasure of origins—for example, philosophers' forgotten erasure of *metis* as praxical knowing in favor of *logos* as the only, idealist paradigm of knowledge (Detienne and Vernant 1974) or their forgotten erasure of artists' praxis-based theory of art in favor of their own aesthetics as an idealist theory of beauty (Lichtenstein 2014).

To understand, then, what distinguishes the *skholè* from other modes of engagement with the world, a working category is needed that avoids misleading a priori distinctions and simultaneously enables us to illuminate actual differences empirically. As distinctive from everyday practices, I turn to craft as such a category encompassing those social practices that are constituted through the social differentiation and specialization of human labor. Because of its etymological root (*kraft*, that is, strength, power) and its genealogy spanning skill, art, and

science, craft conveys well the nature of labor as productive (creative) and reproductive and of knowledge as theoretical, praxical, and practical. This is an alternative to the French *métier* that might be even more appropriate here, since it means profession and competence but can also refer to the artisan's *instrument*, such as a loom—the *praxeological* metaepistemological significance of the latter connotation is precisely what is unfortunately lost in the translation of Bourdieu et al.'s (1968) *Le métier de sociologue* into *The Craft* (not of *the sociologist*, but) of *Sociology* (1991).

Understood as socially differentiated expert practice, craft encompasses the whole spectrum of human specialized labor and can be mobilized to empirically explore the specificities of the *skholè* as one kind among others—one that tends to be located at the mental extreme of the mental-manual spectrum, and wherein the “intimate connection between hand and head” (Sennett 2008, 9) appears, or is claimed, to be dissolved to the benefit of the latter's prominence. For the purpose of a comparative sociology of IR knowledge, this spectrum should be critically interrogated by investigating the effect on epistemic representations of different variations of the involvement of the hand and the head (or, as discussed earlier, of engagement with materiality and abstraction) across different crafts.

One can pursue a *narrow* version of such a comparative inquiry by focusing on the craft of (IR) scholars; (IR) academics are differently located along the mental-manual spectrum typified by the simplistic division between theoretical and experimental/empirical knowledge, and one merely needs to investigate how their different distance from their subject-matter and their different engagement with its concrete manifestations affect their conceptualizations, explanations, and other representations of it. The discussion of methodologies, usually *subordinated* to the discussion of epistemology, would thereby *inform* a bottom-up reconstruction of epistemological problems and standards for IR. Such an inquiry can converge with the study of scholars' everyday practices to understand how the scholarly *habitus* that sustain the *skholè* are formed both before and after socialization into science, philosophy, and academia.

It is, however, the lateral extension of the sociology of IR knowledge *beyond* the *skholè* that promises the most insightful comparison. Here, the point would be to understand how variations in the involvement of the hand and the head across different crafts and variations in the nature of laborers' physical settings, materials, instruments, and techniques, as well as their relation to them, affect their epistemic relation to their subject-matter and to the world. This first entails critically interrogating such sociopolitically constructed categories as intellectuals and craftsmen, which are obstacles to sociological understanding.

So-called intellectuals are not the only social laborers for whom mental labor and theoretical knowledge are epistemically central, just as so-called craftsmen are not the only ones for whom manual labor, praxical knowledge, and practical knowledge are. In general terms, insofar as theoretical knowledge corresponds to a *judgment* made about the meaning of some object, phenomenon, claim, or event, every individual engages in everyday epistemic acts, and every such act is grounded in some more or less consistent, explicit, and conscious epistemology—a layman's theory of knowledge/truth as it were. This epistemology is merely differently formalized as it mainly transpires in everyday discourse, conversations, and arguments about the world, in the various (e)valuations that underscore everyday behavior in it, and in behavior itself.

Similarly but more distinctively, every artisan and nonartisan craft, from medicine to legislation and from engineering to poetry, involves a set of theoretical, praxical, and practical knowledges whose underlying epistemology can be revealed through a praxiographic investigation of their epistemic operating system (e.g., the *metis* of the artisan (Schwint 2002) or her “intelligent hand” (Sennett 2008)). The artificial opposition of science and the arts has consecrated the idea that such epistemic frameworks are substantially different from those with which

epistemologists and philosophers of science are concerned—despite the role of artist-engineers and craftsmen in the constitution of modern science (Zilsel 2003; Valleriani 2010).

This is related to, and exacerbated by, the fact that epistemology is predominantly conceived and pursued as a theory of *propositional knowledge* (Zagzebski 1999), focused on the meaning and validity of *statements* about the world. Because the epistemic corpus of the arts is “a ‘know-how’ without discourse” (de Certeau [1980] 1990, 103) embodied in the operations and material cultures of technique, the practice-based epistemologies of artists and artisans remain invisible at best, unless they are naturalized into existence by a trained-philosopher-turned-craftsman (e.g., see Crawford 2009)—and in the worst case, transmuted into theory through a scholastic hijacking by non-practitioner-philosophers. This perpetuates the tendency to evaluate the knowledges of art from the perspective of science. If one rather considers that *homo sapiens* has always necessarily been *homo faber* and that art is the meeting of reason and nature (Gingras 2005) along various epistemic and praxical pathways and through various physical configurations, bodily deployments, techniques, instruments, and materials, then one can reverse the prism of reference and ask (IR) scholars to interrogate the art through which they speak of the world: What materials of *the world* do we craft through our labor? Or are we artisans of representations through and through?

Such metaepistemological investigations should be complemented by a praxiography of the *transmission* of IR *qua* craft, which would tell us more about our epistemic ideologies and their consequences than the close critique of IR scholars’ *ideas*. Academics rely heavily, and sometimes exclusively, on the textual medium to communicate their knowledges to others. This reflects the fact that most of what we know academically we know because we are told by others—in the idealist categories of foundationalist-analytical philosophy (Russell 1910–11) this “knowledge by description”, as opposed to “knowledge by acquaintance”, is our predominant, *language*-mediated epistemology. The most striking aspect of this tendency is that even knowledges required for empirical research are incorporated into curricula through textual media—we are *told*, rather than *shown*, how to know and how to deploy research methods; we learn about methods instead of learning them; we teach them to students in the classroom, not in the field of direct engagement with our object-world where epistemic problems actually originate and crystallize *as* problems (Bloor 1976). Our idealist practice and our metaepistemological idealism thereby recursively produce and naturalize each other.

In other social realms of epistemic activity such idealism is still marginal. In artisanal crafts and in most skills of everyday life, apprenticeship and trial-and-error are the alternative model of learning and teaching: a form of transmission that leaves no systematic documentary trail and that needs to be observed, even experienced, to be captured and understood. Neither bakers, nor carpenters learn by consulting written texts, which doesn’t prevent them from gaining an expert theoretical understanding even of the underlying scientific bases of their crafts. But philosophers’ outsider idealism has been creeping into such domains of praxis, from the *Encyclopédie*’s early attempts to represent praxical knowledges to contemporary beliefs that we can learn any skill by reading a self-help book about it—an other manifestation of how “our culture [has] cancerize[d] vision” (de Certeau [1980] 1990, xlviii).

And yet actual practice confirms that there is no real epistemic substitute for doing; this, one can easily verify by merely trying and failing, but the point is to draw the consequences of the disjunction between an idealist understanding of thought and practice and a praxeological one. Praxeological epistemography is the response to the metaepistemological implications of this disjunction. Its starting point is the acknowledgment that, insofar as it is intrinsically grounded in the *erasure* of practice as mediator and condition of *all* human knowledge, idealist

philosophical-epistemology is not merely impotent as a theory of such knowledge, but is fundamentally itself a major obstacle to knowing.

In a recent keynote address [Nicholas Onuf \(forthcoming\)](#) urged us to reconnect with the legacy of craft that IR “traded in . . . for the cult of theory subject to the methods of science” and to seriously reflect on how the divorce of the two cultures has affected our understanding and practice of our vocation as well as our ability to serve the common good. Approaching IR through a sociology of craft would first allow us to understand how different configurations of social labor—the most structured and structuring medium of our existential boundedness—affect epistemic standpoints and hence understand the specificity of our own. But insofar as we inhabit a common world upon whose objects IR scholars have no monopoly, a comparison of how our own subject-matter is perceived and lived by those whose labor is differently engaged in/with the world can also further illuminate the sociohistorically and praxically situated grounding of our scholarly worldview, as well as its distinctive *social value* and *worth*.

IR is now interested in how the international, security, borders, etc. are understood by ordinary people that inhabit the world differently—diplomats, refugees, or border security agents. This is an important investigation that should be pursued more systematically (i.e., explicitly and confidently advanced, against the snobbery of metatheorists, as an inquiry into everyday *epistemology*). But, it needs to specifically focus on differentiated social labor. Without this, we cannot ground our own *vocational* epistemology in a properly reflexive understanding of the social determinants of our philosophy and science. And without that, we cannot fully enact our social role as a legitimate and responsible competitor in the social struggles for meaning, truth, and action.

Indeed, an idealized (e.g., Weberian) understanding of our vocation based on analytical demarcations cannot illuminate (to us and others) *the social history and hence the nature* of the place from which we speak to the world about the world. And unless we ourselves understand what objectively creates our scholarly standpoint as a *distinctive* one (regardless of whether it is or not superior), we cannot successfully address the social reactions this standpoint provokes (such as recurrent attacks on our expertise) or navigate the social dilemmas and conflicts in which it engages us. It is in this sense that the pursuit of a better theory of (our) knowledge—a better epistemology—is paradoxically the shortest and most efficient way of addressing IR’s perennial questions about what we are *practically* for ([Brown 2016](#)).

Conclusion

The first purpose of this article was to draw attention to, and diagnose, the failure of IR’s sociological turn to extend the reach of sociological reason into the philosophical turf of epistemology. Its second purpose was to revive and deploy, in conceptually and empirically meaningful terms, the radical version of the sociology of knowledge that can achieve an autonomous reconstruction of epistemology suited to a post-Kantian consciousness. I hope to have adequately and coherently mapped the terrain from which such a reconstruction can be successfully pursued, thereby laying a solid basis for a future discussion of the actual methodologies and methods that serve such a project, as well as its preliminary results. In the meantime, some concluding remarks on its critical and reconstructive objectives might help further highlight its significance in the current global socio-intellectual context.

The sociology of knowledge was born in and of socio-intellectual transformations and crises similar to the globalized one(s) we are witnessing today—the rise, coexistence, and violent competition of profoundly contradictory worldviews; the erosion of epistemic and sociomoral consensus; the destabilization of socioepistemic authorities and the sionormative orders they sustain. Its distinctive gaze,

purpose, and instruments were forged in, and in response to, such critical transformations, with a belief that reflexivity enabled a lucid critique of contemporaneous paradigms of truth without giving up on the possibility of an epistemically meaningful future.

The sociology of knowledge, then, was the first critical engagement with the ‘politics of truth’ that triggered the postpositivist turn, and its proper revival can help us today face the ‘politics of untruth or post-truth’ that now place postpositivists in an uncomfortable socio-intellectual position. One should acknowledge the current malaise without necessarily endorsing the accusation that postfoundationalism’s critique of truth, facts, objectivity, and science is single-handedly responsible for the erosion of their social value. If we take seriously the notion that ideas matter in the social constitution of the social world, then we do have to honestly consider the actual socioacademic impact of this critique, but also ask whether we have adequately equipped ourselves (and others) to face the full consequences of the loss of epistemic foundations—especially our seeming inability to sustain a coherent social discourse on the validity of (social-)science’s own truths when it finds itself under attack in the sociopolitical arena.

For those who, two decades ago, entirely dismissed Alan Sokal’s warning about epistemic relativism and deconstruction (Sokal and Brimont 1998), Sokal’s revenge might bear only poisonous fruit—a reactionary return to an extreme positivism/scientism desperately brandished against the new dogmas of the age, a stubborn retreat into increasingly idealized postures of critique, or a frantic flight back into the pragmatics of political struggle. Neither of these positions—including Sokal’s—can coherently reconcile the social defense of truth with a critical understanding of its social nature and its social conditions of possibility. Nor are all postpositivisms capable of carrying such an important and urgent project—Which theoretical positions on truth and science confidently and critically expressed on the pages of IR journals are honestly compatible, and which are embarrassingly at odds, with the actual trust their authors place in the knowledges of the physicians, aeronautic engineers, and pharmacists that sustain their daily lives?

If freed of its self-imposed limitations, a social constructionism informed by a revolutionary sociology of knowledge can deliver a coherent, empowering, and morally responsible position on knowledge, truth, and science. This requires a more sophisticated and comprehensive formulation of the nature and processes of social constitution, but also a consideration of the proper nature and role of human agency in such processes. Social-determination theorists remind us that while the world we engage is indeed one of our own making, it makes us back—and thereby constrains us—as well as the categories through which we perceive, value, and enact it. The sociology of knowledge is therefore also an invitation to acknowledge again, and reinstitute without inhibition, the specific criticality of the *structuralist* perspective, so that we might properly “locate [our] responsibilities where [our] freedoms really are” (Bourdieu 1990b, 15).

References

- ACUTO, MICHELE. 2014. “Everyday International Relations: Garbage, Grand Designs, and Mundane Matters.” *International Political Sociology* 8 (4): 345–62.
- ADLER, EMANUEL, AND VINCENT POULIOT. 2011. “International Practices.” *International Theory* 3 (1): 1–36.
- ALEJANDRO, AUDREY. *Western Dominance in International Relations? The Internationalisation of IR in Brazil and India*. London: Routledge, forthcoming.
- ARENDET, HANNAH. (1958) 1998. *The Human Condition*, 2nd ed. Reprint, Chicago: University of Chicago Press.
- ARISTOTLE. 2004. *The Nicomachean Ethics*, new ed. London: Penguin.
- ARMITAGE, DAVID. 2000. *Foundations of Modern International Thought*. Cambridge, UK: Cambridge University Press.

- ASHWORTH, LUCIAN. 2014. *A History of International Thought*. Abingdon, UK: Routledge.
- BACHELARD, GASTON. 1953. *Le matérialisme rationnel*. Paris: PUF.
- BARTELSON, JENS. 1995. *A Genealogy of Sovereignty*. Cambridge, UK: Cambridge University Press.
- BECKER, HOWARD S. (1986) 2007. *Writing for Social Scientists*, 2nd ed. Reprint, Chicago: University of Chicago Press.
- BERENSKOETTER, FELIX, ed. 2016. *Concepts in World Politics*. London, UK: Sage.
- BERGER, PETER, AND THOMAS LUCKMANN. (1966) 1991. *The Social Construction of Reality*. Reprint, London: Penguin.
- BLOOR, DAVID. 1976. *Knowledge and Social Imagery*. Chicago: University of Chicago Press.
- BOURDIEU, PIERRE. 1983. "Les sciences sociales et la philosophie." *Actes De La Recherche En Sciences Sociales* 47–48, 45–52.
- . 1989. "Social Space and Symbolic Power." *Sociological Theory* 7 (1): 14–25.
- . 1990a. "The Scholastic Point of View." *Cultural Anthropology* 5 (4): 380–91.
- . 1990b. *Homo Academicus*. Paris: Minuit.
- . (1972) 2000. *Esquisse d'une théorie de la pratique*. Reprint, Paris: Seuil.
- . 2001. *Science de la science et réflexivité*. Paris: Raisons d'Agir.
- . 2012. *Sur l'Etat*. Paris: Seuil.
- BOURDIEU, PIERRE et al. 1968. *Le métier de sociologue: Préalables épistémologiques*. Paris: Mouton-Bordas. [Trans. (1991) *The Craft of Sociology: Epistemological Preliminaries*. Berlin: de Gruyter].
- BROWN, CHRIS. 2016. "Theory and Practice in International Relations." In *International Relations Theory Today*, 2nd ed., edited by Ken Booth and Toni Erskine, 39–52. Cambridge, UK: Polity.
- BUEGER, CHRISTIAN. 2012. "From Epistemology to Practice: A Sociology of Science for International Relations." *Journal of International Relations and Development* 15: 97–109.
- . 2014. "Pathways to Practice: Praxiography and International Politics." *European Political Science Review* 6 (3): 383–406.
- BUEGER, CHRISTIAN, AND FRANK GADINGER. 2014. *International Practice Theory*. Basingstoke, UK: Palgrave.
- CHILDE, VERA GORDON. 1949. *Social Worlds of Knowledge*. Oxford: Oxford University Press.
- COLLINS, RANDALL. 1998. *The Sociology of Philosophies*. Cambridge, MA: Harvard University Press.
- CRAWFORD, MATTHEW B. 2009. *Shop Class as Soulcraft*. London: Penguin.
- DAVIES, MATTHEW, AND MICHAEL NIEMANN. 2017. *International Relations and Everyday Life*. London: Routledge.
- DEAR, PETER. 2001. "Science Studies as Epistemography." In *The One Culture?*, edited by Jay A. Labinger and Harry Collins, 128–41. Chicago: University of Chicago Press.
- DE CERTEAU, MICHEL. (1980) 1990. *L'invention du quotidien*, vol. 1. Reprint, Paris: Gallimard.
- DETIENNE, MARCEL, AND JEAN-PIERRE VERNANT. 1974. *Les ruses de l'intelligence: La mètis des Grecs*. Paris: Flammarion.
- DURKHEIM, EMILE. 1894. *Les règles de la méthode sociologique*. Paris: Payot.
- . 1960. *Les formes élémentaires de la vie religieuse*, 4th ed. Paris: PUF.
- DURKHEIM, EMILE, AND MARCEL MAUSS. (1963) 1970. *Primitive Classification*. Reprint, London: Routledge.
- EJIR. 2013. "Special Issue: The End of IR Theory?" *European Journal of International Relations* 19 (3): 405–665.
- ELIAS, NORBERT. 1971a. "Sociology of Knowledge: New Perspectives, Part One." *Sociology* 5 (2): 149–68.
- . 1971b. "Sociology of Knowledge: New Perspectives, Part Two." *Sociology* 5 (3): 355–70.
- . 1982. "Scientific Establishments." In *Scientific Establishments and Hierarchies*, edited by Norbert Elias, Herminio Martins, and Richard Whitley, 3–69. Dordrecht, NL: Reidel.
- FOGELIN, ROBERT. 1994. *Pyrrhonian Reflections on Knowledge and Justification*. Oxford: Oxford University Press.
- FOURCADE, MARION. 2009. *Economists and Societies*. Princeton, NJ: Princeton University Press.
- FRIESE, HEIDRUN. 2001. "Thresholds in the Ambit of Discourse: On the Establishment of Authority at Academic Conferences." In *Little Tools of Knowledge*, edited by Peter Becker and William Clark, 285–312. Ann Arbor: University of Michigan Press.
- FULLER, STEVE. 1988. *Social Epistemology*. Indianapolis: Indiana University Press.
- GIDDENS, ANTHONY. 1984. *The Constitution of Society*. Cambridge, UK: Polity.
- GINGRAS, YVES. 2005. *Eloge de l'homo techno-logicus*. Montréal: Fides.
- GRENIER, FÉLIX. 2015. "Explaining the Development of International Relations: The Geo-Epistemic, Historiographical, Sociological Perspectives in Reflexive Studies on IR." *European Review of International Studies* 2 (1): 72–89.
- GRENIER, FÉLIX, AND JONAS HAGMANN. 2016. "Sites of Knowledge (Re-)Production: Toward an Institutional Sociology of International Relations Scholarship." *International Studies Review* 18: 333–65.

- GUILLAUME, XAVIER. 2011. "Resistance and the International: The Challenge of the Everyday." *International Political Sociology* 5 (4): 459–62.
- GUZZINI, STEFANO. 2000. "A Reconstruction of Constructivism in International Relations." *European Journal of International Relations* 6 (2): 147–82.
- . 2013. "The Ends of International Relations Theory: Stages of Reflexivity and Modes of Theorizing." *European Journal of International Relations* 19 (3): 521–41.
- HAGMANN, JONAS, AND THOMAS J. BIERSTEKER. 2012. "Beyond the Published Discipline: Toward a Critical Pedagogy of International Studies." *European Journal of International Relations* 20 (2): 291–315.
- HAMATI-ATAYA, INANNA. 2016. "IR Theory and the Question of Science." In *International Relations Theory Today*, 2nd ed., edited by Ken Booth and Toni Erskine, 69–84. Cambridge, UK: Polity.
- HARAWAY, DONNA. 1988. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies* 14 (3): 575–99.
- HEELAN, PATRICK. 1983. *Space-Perception and the Philosophy of Science*. Berkeley: University of California Press.
- HOPF, TED. 1998. "The Promise of Constructivism in International Relations Theory." *International Security* 23 (1): 171–200.
- HUMPHREYS, ADAM R. C. 2016. "Problems of Causation in World Politics." *Journal of International Relations and Development*, <http://dx.doi.org/10.1057/jird.2016.14>.
- IHDE, DON. (1976) 2007. *Listening and Voice. Phenomenologies of Sound*, 2nd edition. Reprint, Albany, NY: SUNY Press.
- JACKSON, PATRICK THADDEUS. 2011. *The Conduct of Inquiry*. London: Routledge.
- JAHN, BEATE, ed. 2006. *Classical Theory in International Relations*. Cambridge, UK: Cambridge University Press.
- JASANOFF, SHEILA, ed. (2004) 2006a. *States of Knowledge*. Reprint, London: Routledge.
- . (2004) 2006b. "Ordering Knowledge, Ordering Society." In *States of Knowledge*, edited by Sheila Jasanoff, 13–45. Reprint, London: Routledge.
- JONES, CHARLES. 1997. "Cart, Mannheim, and a Post-positivist Science of International Relations." *Political Studies* 45 (2): 232–46.
- KILMINSTER, RICHARD. 1998. *The Sociological Revolution*. London: Routledge.
- KNORR-CETINA, KARIN. 1981. *The Manufacture of Knowledge*. Oxford: Pergamon.
- . 1999. *Epistemic Cultures*. Cambridge, MA: Harvard University Press.
- KRISTENSEN, PETER MARCUS, "Rising Powers in the International Relations Discipline" (Ph.D. dissertation, University of Copenhagen, 2015).
- KUSTERMANS, JORG. 2016. "Parsing the Practice Turn: Practice, Practical Knowledge, Practices." *Millennium: Journal of International Studies* 44 (2): 175–96.
- LAMONT, MICHÈLE. 2009. *How Professors Think*. Cambridge, MA: Harvard University Press.
- LATOUR, BRUNO, AND STEVE WOOLGAR. 1979. *Laboratory Life*. London: Sage.
- LAVINE, THELMA Z. 1950. "Knowledge as Interpretation: An Historical Survey." *Philosophy and Phenomenological Research* 10 (4): 526–40.
- LEFEBVRE, HENRI. (2002) 2008. *Critique of Everyday Life*, vol. 2. Reprint, London: Verso.
- LICHTENSTEIN, JACQUELINE. 2014. *Les raisons de l'art*. Paris: Gallimard.
- LYNCH, MICHAEL. 1985. *Art and Artifact in Laboratory Science*. London: Routledge.
- MANNHEIM, KARL. 1936. *Ideology and Utopia*. New York: Harvest Books.
- . 1982. "The Distinctive Character of Cultural-Sociological Knowledge." In *Structures of Thinking*, 37–139. London: Routledge.
- . 1986. *Conservatism*. London: Routledge.
- . (1936) 2000a. "The Problem of a Sociology of Knowledge." In *Essays on the Sociology of Knowledge*, 134–90. Reprint, London: Routledge.
- . (1936) 2000b. "On the Interpretation of *Weltanschauungen*." In *Essays on the Sociology of Knowledge*, 33–83. Reprint, London: Routledge.
- . (1936) 2000c. "Historicism." In *Essays on the Sociology of Knowledge*, 84–133. Reprint, London: Routledge.
- MARX, KARL. 1978. "Preface to *A Contribution to the Critique of Political Economy*." In *The Marx-Engels Reader*, 2nd ed., edited by Robert C. Tucker, 3–6. New York: Norton.
- MARX, KARL, AND FRIEDRICH ENGELS. 1978. "The German Ideology." In *The Marx-Engels Reader*, 2nd ed., edited by Robert C. Tucker, 146–200. New York: Norton.
- MAYER, MAXIMILIAN et al., eds. 2014. *The Global Politics of Science and Technology*. Heidelberg, DE: Springer.
- MERTON, ROBERT K. 1973. *The Sociology of Science*. Chicago: University of Chicago Press.

- MILLER, CLARK A. (2004) 2006. "Climate Science and the Making of a Global Political Order." In *States of Knowledge*, edited by Sheila Jasanoff, 46–66. Reprint, London: Routledge.
- MILLS, C. WRIGHT. (1959) 2000. "On Intellectual Craftsmanship." In *The Sociological Imagination*, 195–226. Reprint, Oxford: Oxford University Press.
- MOL, ANNEMARIE. 2002. *The Body Multiple*. Durham, NC: Duke University Press.
- ONUF, NICHOLAS G. "What We Do: IR as Craft." In *The Sage Handbook of the History, Philosophy and Sociology of International Relations*, edited by Andreas Gofas, Inanna Hamati-Ataya, and Nicholas G. Onuf. London: Sage, forthcoming.
- QUINE, W.V.O. 1969. "Epistemology Naturalized." In *Ontological Relativity and Other Essays*, 69–90. New York: Columbia University Press.
- ROSA, HARTMUT. 2013. *Social Acceleration*. Columbia: Columbia University Press.
- ROSHCHIN, EVGENY. "The Stumbling Blocks of Contextualism: Presentism and Antiquarianism." Unpublished manuscript, last modified 2014.
- ROSENBERGER, ROBERT, AND PETER-PAUL VERBEEK, eds. 2015. *Postphenomenological Investigations*. Lanham, MD: Lexington Books.
- RUSSELL, BERTRAND. 1910–1911. "Knowledge by Acquaintance and Knowledge by Description." *Proceedings of the Aristotelian Society* 11: 108–208.
- SCHATZKI, THEODORE R. 2001. "Introduction: Practice Theory." In *The Practice Turn in Contemporary Theory*, edited by Theodore R. Schatzki et al. New York: Routledge.
- SCHELER, MAX. 1980. *Problems of a Sociology of Knowledge*. London: Routledge.
- SCHWINT, DIDIER. 2002. *Le savoir artisan, l'efficacité de la métis*. Paris: L'Harmattan.
- SEGALL, MARSHALL H. et al. 1966. *The Influence of Culture on Visual Perception*. Indianapolis, IN: Bobbs-Merrill Co.
- SENNETT, RICHARD. 2008. *The Craftsman*. London: Penguin.
- SHAPIN, STEVEN, AND SIMON SCHAEFFER. 1985. *Leviathan and the Air Pump*. Princeton, NJ: Princeton University Press.
- SOHN-RETHEL, ALFRED. 1978. *Intellectual and Manual Labour*. London, UK: Humanities Press.
- . (1961) 2010. *La pensée-marchandise*. Reprint, Paris: Editions du Croquant.
- SOKAL, ALAN, AND JEAN BRICMONT. 1998. *Fashionable Nonsense*. New York: Picador.
- THOMSON, GEORGE. (1955) 1977. *The First Philosophers*. London, UK: Reprint, Lawrence and Wishart.
- TICKNER, ARLENE B., AND DAVID L. BLANEY, eds. 2012. *Thinking International Relations Differently*. London: Routledge.
- TICKNER, ARLENE B., AND OLE WÆVER, eds. 2009. *International Relations Scholarship Around the World*. London: Routledge.
- TRAWEEK, SHARON. 1988. *Beamtimes and Lifetimes*. Cambridge, MA: Harvard University Press.
- TURTON, HELEN LOUISE. 2016. *International Relations and American Dominance*. London: Routledge.
- VALLERIANI, MATTEO. 2010. *Galileo Engineer*. Dordrecht, NL: Springer.
- WÆVER, OLE. 1998. "The Sociology of a Not So International Discipline: American and European Developments in International Relations." *International Organization* 52 (4): 687–727.
- WENDT, ALEXANDER. 1999. *Social Theory of International Politics*. Cambridge, UK: Cambridge University Press.
- WILDAVSKY, AARON. (1993) 2010. "The Organization of Time in Scholarly Activities Carried Out under American Conditions in Resource-Rich Research Universities." In *Craftways*, 41–56. Reprint, London: Transaction Publishers.
- ZAGZEBSKI, LINDA. 1999. "What is Knowledge?" In *The Blackwell Guide to Epistemology*, edited by John Greco and Ernest Sosa, 92–116. Oxford: Blackwell.
- ZENZEN, MICHAEL, AND SAL RESTIVO. 1982. "The Mysterious Morphology of Immiscible Liquids: A Study of Scientific Practice." *Social Science Information* 21 (3): 447–73.
- ZILSEL, EDGAR. 2003. *The Social Origins of Modern Science*. Dordrecht, NL: Kluwer.