
From subjects to objects: Knowledge in International Relations theory

European Journal of
International Relations
2018, Vol. 24(4) 841–864

© The Author(s) 2017

Article reuse guidelines:

sagepub.com/journals-permissions

DOI: 10.1177/1354066117741529

journals.sagepub.com/home/ejt



Bentley B. Allan

Johns Hopkins University, USA

Abstract

There has been a resurgence of interest in the role of scientific knowledge and expertise in International Relations, but it is not clear what the theoretical value-added of this work is. This article places recent work on scientific knowledge and expertise in a longer-term perspective. The history shows that knowledge has played an important role in International Relations theory since Carr and Morgenthau, but that thinking has been trapped within a simple conceptual framework centered on tracing how knowledge shapes the beliefs and interests of international subjects. This mode of theorizing first entered International Relations via Mannheim and has been further developed by Foucauldian and practice-based approaches since the 1990s. Outlining the history of knowledge from Carr through Haas to the present makes it possible to identify the distinctive contribution of recent work: whereas International Relations has focused on how knowledge shapes subjects such as states and international organizations, recent work by Corry, Sending, and others reorients International Relations to the constitution of governance objects. On the object-centered view, knowledge plays a key role in the construction of the hybrid entities like the economy and the climate that structure the landscape of international politics.

Keywords

Carr, governance objects, Haas, International Relations theory, Mannheim, Morgenthau, sociology of knowledge, subjects

Corresponding author:

Bentley B. Allan, Department of Political Science, Johns Hopkins University, 3400 N. Charles St, Baltimore, MD 21218, USA.

Email: bentley.allan@jhu.edu

Introduction

There has been a resurgence of interest in the role of scientific knowledge and expertise in International Relations (IR).¹ Recent studies have drawn on work by Bourdieu, Foucault, Latour, and science and technology studies to theorize how scientific knowledge and expertise shape international politics. Bueger (2014) has helped make sense of this work by distinguishing between three generations of scholarship on expertise. The first generation conceptualized experts as *actors* that had identifiable causal effects on policymaking. A second generation examined *discourses* of expertise to theorize how epistemes shaped and stabilized international politics. Finally, Bueger argues, a third generation has shifted the unit of analysis from discourses to *practices* of expertise. Here, scholars offer detailed investigations of the activities and artifacts that assemble governance arrangements by linking agencies, epistemes, and technologies of governance.

Bueger's classification is helpful, but on his schema, it is not clear what the theoretical value-added of recent work is. Bueger suggests that recent work has added discourses and practices to our conceptual toolbox for the study of knowledge and expertise, but these have been part of IR for some time. Ruggie (1975) theorized a role for epistemic discourses in the 1970s and Ashley (1989) foregrounded the role of "knowledgeable practices" in producing international structure. New studies have clearly produced important new insights, but they do not constitute a major break insofar as they maintain a focus on how knowledgeable practices shape the interests and actions of international *subjects*.

In what follows, I build on Bueger's insight by investigating the history of scientific and expert knowledge in Western IR theory. By excavating ideas about science and expertise in the work of Carr, Morgenthau, Haas, Keohane, Oye, and other leading figures, I show that concepts of knowledge have long been an important component of debates about power, interests, cooperation, and the structure of the system. In addition, I demonstrate the persistence of a subject-centered conceptual framework that focuses on tracing how knowledge shapes the beliefs, interests, and practices of international subjects such as policymakers, international organizations (IOs), and states. Thus, Bueger has identified three movements within what Corry (2013: 31–37) identifies as the reigning subject-centered framework.

With this history in hand, it is easier to identify the distinctive contribution of some recent work by Olaf Corry (2013), Eva Lövbrand (Lövbrand et al., 2009), Mikael Rask Madsen (2011), Ole Jacob Sending (2015), and others. Following Corry's articulation of an object-centered turn, I demonstrate that this work shifts IR from subjects to objects. These approaches have not just changed the unit of analysis, but challenged the basic ontological and epistemic assumptions of IR theory. Corry's proposed turn is concerned with far more than re-theorizing the role of knowledge in IR. Nonetheless, an investigation into the history of knowledge reveals the distinctive contribution that a turn to objects can make in a specific domain. In short, I suggest that rather than focusing on how knowledge shapes subjects, new work analyzes the place of knowledge in the constitution of international objects. International objects include the economy, the climate, global public health, the balance of power, and the international system itself. Objects are hybrid entities comprised of ideas, artifacts, physical phenomena, and practices. For

example, the economy is not reducible to its representation in statistical tables or newspaper articles. Rather, it is the product of yoking together quantitative representations, ontological distinctions, colonial governance practices, and monetary transactions (Mitchell, 2002, 2005).

The historical analysis that follows makes a number of other contributions. First, it shows that recent turns to the sociology of knowledge and reflexivity are as old as the discipline itself.² However, different vocabularies have hidden what are essentially similar theoretical moves over five decades of scholarship.³ This means, for example, that few realize that rationalists like Oye and Keohane recognized a central role for knowledge in constituting international politics. Second, the article shows that Karl Mannheim is an important figure in the history of IR theory. Work on knowledge up through the 1970s operated within a discursive space structured by Mannheimian categories and frames. Finally, it builds on Levine's close reading of Ernst Haas (Levine, 2012; Levine and Barder, 2014). However, whereas Levine focuses on the ethical-political side of Haas's thought, here I develop the theoretical side, showing that his insights led him to the cusp of an object-centered theory.

Particular ideology: Mannheim in Carr and Morgenthau

Existing histories of knowledge in IR theory often begin with the functionalist line of thought that was reconstructed by Ernst Haas and introduced into rationalist and epistemic community arguments (Bueger, 2014; Cross, 2013; Mayer et al., 2014). However, careful attention to the work of Carr and Morgenthau reveals that knowledge has been central to thinking about stability and conflict in international order since the early days of Anglo-American realism. This early history is important because Carr and Morgenthau brought knowledge into realism as "particular ideology" by drawing on the work of Karl Mannheim.⁴

The recent historiography of realism has identified Karl Mannheim as an important influence on the development of Carr's and Morgenthau's thought (Breiner, 2014; Frei, 2001: 38–39; Gismondi, 2007: 139–142; Jones, 1998: 127; Molloy, 2006: 38–39). It is likely that this influence was established through personal relationships. Carr and Mannheim were both members of "The Moot," a British discussion group of prominent scholars and intellectuals in the 1930s (Shils, 1995: 228). Morgenthau and Mannheim had met earlier, in Frankfurt, where Mannheim was chair of sociology and Morgenthau was serving as a clerk to Hugo Sinzheimer (Frei, 2001: 38–39).

As recent scholarship has shown, Mannheim's sociology of knowledge influenced Carr's and Morgenthau's ethical-political positions about the role of intellectuals in society (Breiner, 2014; Gismondi, 2007; Jones, 1998; Molloy, 2006). Mannheim's (1997 [1936]) sociology of knowledge was built on two claims: (1) all knowledge emerges from a set of concrete historical circumstances; but (2), nonetheless, intellectuals can have an important, autonomous influence on social and political action. Further, Mannheim insisted that social scientists should apply the sociology of knowledge to their own traditions. By examining the conditions in which their own thought developed, social scientists could obtain a form of reflexive objectivity, "not through the exclusion of evaluations but through the critical awareness and control of them" (Mannheim, 1997

[1936]: 5). Along these lines, Carr and Morgenthau believed they should play a role in public debates. Carr rejected the observer–observed distinction and saw himself as an advocate for a particular form of political knowledge that he hoped would change the conduct of international politics itself (Molloy, 2006: 30–38). Similarly, Morgenthau saw his own position as conditioned by social forces and hoped to shape US foreign policy (Molloy, 2006: 48). In short, both aimed to produce knowledge that would alter the beliefs of relevant subjects (leaders, diplomats, and policymakers) and change the course of international politics.

While the influence of Mannheim on Carr's and Morgenthau's ethical-political orientation is well-established, less is known about his influence on Carr's and Morgenthau's empirical analyses. Mannheim's empirical sociology was designed to contest the Marxist analysis of ideology by developing the Weberian analysis of ideas (Breiner, 2014: 42). Mannheim agreed with Marxists that all thought was shaped by social and economic conditions, but worried that the Marxist analysis of ideology had reduced academic debate to the reciprocal unmasking of all knowledge as "bourgeois ideology." Instead, Mannheim (1997 [1936]: 1–11) wanted to defend an important role for a "free intelligentsia" that would provide "scientific guidance" for society.

In advancing this argument, Mannheim distinguished between "particular" and "general" ideology. Particular ideology is defined as "more or less conscious disguises of the real nature of a situation, the true recognition of which would not be in accord with his interests" (Mannheim, 1997 [1936]: 49). The study of particular ideology is a form of psychological analysis that generalizes "[t]he distrust and suspicion which men everywhere evidence toward their adversaries" (Mannheim, 1997 [1936]: 61). Mannheim (1997 [1936]: 63) places Marxism itself within such an analysis by tracing the historical processes by which "suspicion and scepticism toward public utterances developed into a methodical search for the ideological element in all of them."

By contrast, a general ideology exists when false beliefs structure the world view of an age. Whereas particular ideology is concerned with an individual's beliefs, general ideology is concerned with the "total *Weltanschauung*" (Mannheim, 1997 [1936]: 50). Thus, the analysis of general ideology focuses on the general "characteristics and composition of the total structure of the mind of this epoch or group" (Mannheim, 1997 [1936]: 63). Mannheim argues that the origin of the crisis in European thought lay in the merging of particular and general ideology. The distrust or suspicion of others' beliefs so central to the unmasking of particular ideologies had been generalized into the suspicion that all thought merely expressed the ideology of the age.

Mannheim's solution was to dissolve the analysis of ideology into the sociology of knowledge. Methodologically, this meant reconstructing "the relations between certain mental structures and the life-situations in which they exist" (Mannheim, 1997 [1936]: 71). With Hegel, Mannheim foregrounded how knowledge, conceptualized broadly as "mental structures," changes over time (Mannheim, 1997 [1936]: 238). However, the fact that all knowledge is rooted in shifting life-situations is not "a source of error" (Mannheim, 1997 [1936]: 71). Even though "all historical knowledge is relational knowledge," it could nonetheless maintain "intimate contact" with reality and thereby reveal its meaning (Mannheim, 1997 [1936]: 71, 72). With this historical-sociological analysis in hand, the intellectual could then move onto the "normative"

analysis of the values and ethical principles at stake in a given life-situation (Mannheim, 1997 [1936]: 71).

Carr and Morgenthau both used Mannheim's sociology to critique liberal rationalism. Carr's (1939) *Twenty Years' Crisis* explicitly acknowledges the influence of *Ideology and Utopia* and sets out to found International Relations "as a critical and profoundly historical social science of the kind envisaged by Mannheim" (Jones, 1998: 133).⁵ Carr's (1939: 22–30) diagnosis of the interwar crisis unfolds as a history of how scientific and rationalist knowledge shaped international politics. On Carr's (1939: 22–23) account, 19th-century liberal thinkers like Bentham and Mill supposed that "[r]eason could determine what were the universally valid moral laws ... [and] once these laws were determined, human beings would conform to them just as matter conformed to the physical laws of nature." Carr (1939: 27–28) argues that the League of Nations was bound to fail because it embodied these utopian liberal-rationalist ideas. The League was overly dependent on standardizations and abstractions and so "lost all contact with reality" (Carr, 1939: 30). Carr hoped that this history would reveal liberal thought as a utopian ideology and clear the way for a pragmatic, realistic, and yet moral approach to international politics.⁶

Following Carr, Morgenthau conceptualizes knowledge as particular ideology and argues that liberal rationalism hid the role of power in social and political life. Thus, in both *Scientific Man* (Morgenthau, 1946) and *Politics Among Nations* (Morgenthau, 2006 [1948]), Morgenthau seeks to "unveil liberal ideology in order to reveal the nature of political reality" (Frei, 2001: 198).⁷ In his account, scientific rationalism served the interests of the rising bourgeois class in the 18th and 19th centuries (Morgenthau, 1946: 19; cf. Guillot, 2011: 144; Williams, 2005: 94–101). Liberals then transposed these ideas onto international affairs in what Morgenthau calls the "repudiation of politics." At the 1815 Congress of Vienna, the "science of peace" reduced the balance of power to an exercise in calculation delegated to a statistical commission (Morgenthau, 1946: 95). The League of Nations, in turn, was designed to replace power politics with a rational system of law. On the liberal view, "[p]olitical maneuvering should be replaced by the scientific 'plan,' the political decision by the scientific 'solution,' the politician by the 'expert,' the statesmen by the 'braintruster,' the legislator by the 'legal engineer'" (Morgenthau, 1946: 29). This was problematic because there was bound to be a "permanent gap" between liberal rationalism and the realities of power politics:

[t]he liberal ideologies ... are bound, because of their very abstractness, generality, and claim for absolute validity, to be kept alive after they have outlived their political usefulness and thus to be disavowed by the realities of international politics, which, by their very nature, are concrete, specific, and dependent upon time and place. (Morgenthau, 1946: 73)

Just as Carr hoped to shape British foreign policy, Morgenthau aimed to influence American attitudes toward international politics. He had concluded that American thought contained naive tendencies toward rationalism that made the country susceptible to liberalism (Frei, 2001: 182). To counter this, he offered a political doctrine rooted in the *animus dominandi* and the Weberian vision of politics as a realm of struggle (Morgenthau, 1946: 217; cf. Guillot, 2011: 131). This alternative vision, Morgenthau

hoped, would temper the ambitions of American liberalism. This position reveals a tension in Carr's and Morgenthau's views on expert knowledge. In taking the time and effort to critique liberal-rational knowledge as particular ideology, they acknowledged that it could shape diplomatic practice and even produce a crisis in international politics. However, they also argued that liberal knowledge could not transform the world so completely as to eliminate the realities of power politics. As Carr (1939: 27) concluded, "[r]ationalism can create a utopia, but cannot make it real."

Nonetheless, both Carr and Morgenthau presupposed that their *own* expert knowledge could have effects on diplomatic practice. Since power politics could not be eliminated by rationalist formulas, leaders needed to adopt a prudential, realist approach to the management of international order. That is, they sought to contest liberal-rationalist ideology with a realist variant of rationalism. Liberals might have responded that realism itself was ideological cover for the interests of intellectuals or conservatives. It is not clear on what grounds Carr and Morgenthau would be able to respond that their own knowledge escaped the constraints of particular ideology such that it could make the realist vision of politics reality.

In sum, both Carr and Morgenthau acknowledged the importance of knowledge in international politics. In the Mannheimian frame, knowledge was important because it could constitute and change the beliefs of diplomatic subjects. Their basic empirical strategy of tracing the influence of ideas was consistent with the conceptual framework laid out in Mannheim's appropriation of Hegel: the sociology of knowledge should show how the ideas of subjects change over time. As we shall see, this basic conceptual framework remained intact in IR theories about knowledge from the 1940s through the 1990s.

Ernst Haas and the problem of ideology

In the 1950s and 1960s, Ernst Haas defended liberalism from Carr's and Morgenthau's critique by demonstrating the importance of scientific knowledge and technical expertise. In the 1970s, Haas declared his own neofunctionalist theory obsolete, and throughout the 1980s and 1990s, he articulated a more subtle and fragmented liberal international theory centered on knowledge. While Haas's work on knowledge exhibited both a broad scope and empirical nuance, it remained largely within the subject-centered conceptual framework that entered IR via Mannheim. However, following Levine, I suggest that a shift in Haas's thought around 1975 opened the possibility of moving beyond the Mannheimian conceptual framework toward what I am calling the object-centered view (Levine, 2012: 202–203). However, Haas did not take up this alternative project and returned to a subject-centered analysis of knowledge in the 1980s and 1990s.

Haas's doctoral work on the balance of power reflects the influence of Mannheim. In a 1953 article, Haas shows that the balance is variously invoked as a description, a prescription, an analytical concept, and propaganda or ideology. Haas (1953: 460, 463) draws on Mannheim's concept of general ideology to distinguish ideological from propagandistic uses. The balance is used as propaganda when deployed as "the justification for policies not *ipso facto* related to balancing anything" (Haas, 1953: 462). The balance serves as ideology when objectively "false" beliefs form the basis

of a “total myth system” that underwrites the cohesion and self-confidence of ruling groups (Haas, 1953: 463). For Haas, general ideology is propaganda transformed into collective self-deception.

In the article, Haas aims to move beyond critique toward a theory of international politics that takes the intentions and meanings of policymakers seriously. For this task, the study of self-deception induced by general ideology is important because even self-deceptions have “causative significance” for international outcomes (Haas, 1953: 476). That is, even if policymakers’ ideas about the balance did not correspond to an equal or stable distribution of power in the real world, those beliefs could have important effects.⁸ Thus, Haas proposes a subject-centered study of how scientific knowledge shapes the world views of policymakers and states.

In this vein, Haas’s work on European integration in the 1950s and 1960s takes the form of a Mannheimian sociology of knowledge designed to trace the effects of experts and scientists on state interests. *Beyond the Nation-State* argues, in the spirit of Carr and Morgenthau, that David Mitrany’s functionalism rests on both a “utopian vision of technocratic progress” and lofty assumptions about human nature as “good, rational, and devoted to the common weal” (Haas, 1964: 34, 8). Nonetheless, Haas aimed to reconstruct the functionalist argument and demonstrate that knowledge could be more than particular ideology. As Levine (2012: 205) points out, Haas wanted to show that consensual knowledge could underwrite a politics based not on pure domination, but on some form of morally defensible progress. He conceded that ideology and knowledge were not “absolutely different” but nonetheless wanted to maintain that political choices informed by consensual scientific knowledge were preferable to those based on power and interest alone (Levine, 2012: 205). In this way, he aimed to avoid the relativist implications suggested by the Mannheimian sociology of knowledge.⁹

Haas’s (1964: 34) strategy was to divorce functionalism from Mitrany’s utopianism and reconfigure it as a liberal theory of interest group politics. In Haas’s (1964: 35) account, experts do not displace politics, but facilitate the convergence of interests necessary for lasting cooperation by shaping the “give-and-take” of political contestation. On the one hand, Haas maintains that, in some cases, experts and scientists help states overcome conflict by transforming political issues into technical ones. For example, he suggests that epidemics in 1893 and 1897 forced Britain, Turkey, and Persia to reconcile their differing medical views and agree on a program of quarantines, ship disinfections, standardized inspections, and so on (Haas, 1964: 15). The case shows that when experts reach consensus on causal beliefs, they can facilitate coordination. On the other hand, this optimistic story is contrasted with the nuclear test ban treaty negotiations. Whereas the US sent technocrats to negotiate in the spirit of the Baruch Plan, the Soviets sent scientists with political instructions to take technical positions that bolstered Soviet interests. Soviet scientists were deployed as a veil for Soviet interests (Haas, 1964: 23–24).¹⁰ Haas, then, concedes that knowledge sometimes serves as propaganda or ideology that covers state interests.

Nonetheless, *Beyond the Nation-State* is a direct response to realists, who “assert the primacy of the political and take for granted the presumed hard outer shell of the sovereign nation-state” (Haas, 1964: 23). Haas (1964: 34) contends that states choose to integrate not because welfare trumps politics or because of “a spontaneous surrender to the

myth of the common good,” but because states, under the influence of consensual knowledge, come to perceive that their interests converge. However, since interests rest on values and values change slowly, the convergence of interests is a long-term process. In the end, functional cooperation on “organizational,” not technical, tasks is an important driver of convergence in Haas’s theory (Haas, 1964: 35). The power of experts cannot be taken for granted, but neither can state interests, which change in a process of learning (Haas, 1964: 48).

In the mid-1970s, Haas declared the neofunctionalist program obsolete (Haas, 1975, 1976). The problem was that neofunctionalism was, as Levine and Barder (2014: 871) put it, “predicated upon notions of state and political community with their roots in the 19th century” that “were unequal to the emerging political forms and orders of the 1970s.” As a result, Haas loosened the constraints on his own theorizing so that he could build models to accommodate the indeterminacy and complexity of emerging regimes (Haas, 1975: 179; 1976: 847–856; cf. Levine, 2012: 202–203). In his contribution to the 1975 *International Organization* special issue on epistemic communities, Haas analyzes the problem of “wholes”: “If we are to have politically acceptable master constructs they must be fashioned out of parts which are based on a consensus shared by scientists and laymen, not wholes deduced from the order of nature” (Haas, 1975: 828). The problem, Haas maintains, was that unitary representations of systems, structures, and evolutionary processes were often used to hide the “holes” in empirical knowledge of increasingly complex international regimes. Haas rejects these images in favor of a more fragmented picture of the whole:

There are no structures, just aggregates linked by a changing appreciation of cause–effect chains. There is no global system, just sub-systems which tend to rearrange themselves without central guidance. There is no overall complexity, merely successive and fallible human efforts to understand interdependence. I can see no overriding evolutionary dynamic, only isolated and lonely thrusts into more elaborate forms of survival in one area of concern or another. The very ephemeral and temporary quality of these wholes, and of the fluctuating organizations to which such conceptions must give rise, depends heavily on the changing character of knowledge. (Haas, 1975: 870–871)

So, Haas aims to retain a sense of the whole while leaving room for its indeterminate and dynamic character.

Haas’s solution is to posit a “technology-task-environment” as the relevant whole for the analysis of international regimes. The technology-task-environment was a “concatenation of technologies and purposes” that arises under the conditions of interdependence (Haas, 1975: 872).¹¹ The ocean, global food production, and the global energy system all counted as technology-task-environments. What Haas proposed, but never came back to, was the study of change in technology-task-environments that tracked alterations in purpose, technology, and organizational forms (Haas, 1975: 873–874). Such a study would allow for the dynamic analysis of regimes focused on their problem-solving capacities. Had Haas pursued the idea further, it might have led him away from the subject-centered sociology of knowledge and toward the study of objects. In effect, Haas’s idea was to place the problems themselves (conceived as configurations of physical phenomena, scientific knowledge, political pressures, and institutional rules) at the center of the

analysis. This would have been a departure from his earlier work, which sought to explain the origins of intentions, interests, and cooperation. However, Haas never pursued a detailed historical analysis of how technology-task-environments emerge and structure regimes.

Instead, Haas's work in the 1980s and 1990s returned to a subject-centered mode, specifying the conditions under which we can expect either adaptation or learning in regimes and IOs (Haas, 1980, 1982, 1990). This work suggested that the central task for a theory of knowledge in IR was to examine how science and expertise shaped problem definitions, interests, and policies. Haas remained focused on how science could be traced to subjects. Thus, it unfolded within the same conceptual universe as the Mannheimian sociology of knowledge from whence Haas began. However, within the idea of the technology-task-environment was the possibility of a creative break. As we shall see, such a research program might have expanded IR theory to include how subjects make and constitute objects comprised of amalgamations of purposes, technologies, institutions, rules, and norms.

Epistemes and interests: Knowledge in the 1980s and 1990s

Haas's work responded to the realist claim that expert or scientific knowledge was just particular ideology by showing how consensual knowledge shaped patterns of conflict and cooperation. In this section, I show how others extended Haas's basic argument in the 1980s and 1990s. This history shows two things. First, despite its diversity, this work remained within the subject-centered frame of the sociology of knowledge. This is true of work across the theoretical spectrum, whether they were Haas's students, rationalists, constructivists, or critical theorists. Second, there is a lot of theoretical continuity between work in this period and the recent work on discourses and practices highlighted by Bueger. Throughout the 1980s and 1990s, scholars highlighted how discourses and knowledgeable practices constituted the mental structures and behaviors of subjects.

First, Haas's student John G. Ruggie (1975) generalized neofunctionalism beyond integration theory. Ruggie's contribution to the 1975 special issue of *International Organization* began with a Haasian puzzle: technological change did not always lead to positive collective action, as functionalism suggested. Ruggie's explanation hinges on whether the response to technology was collective or individual and scientific or political. Ruggie introduces the concept of "epistemic communities" to account for the collective, scientific responses in which common "cognitive beliefs" are institutionalized. Ruggie (1975: 569–570) borrows the concept "episteme" from Foucault, defining it as "a dominant way of looking at social reality, a set of shared symbols and references, mutual expectations and a mutual predictability of intention." He then defines an epistemic community as the "interrelated roles which grow up around an episteme" (Ruggie, 1975: 570). Read expansively, Ruggie's formulation defines epistemic communities not in terms of actors that share causal beliefs, but as actors oriented to or drawing from the same body of knowledge conceptualized as an episteme.

This Foucauldian approach to knowledge was taken up by constructivists and critical theorists in the 1980s and 1990s. For example, Ashley's (1989) application of Foucault and Bourdieu to IR contends that the construction of an international order depends on a

hegemonic definition of reality. Such a definition is maintained by imposing a common purpose backed by “knowledgeable practice” (Ashley, 1989: 254). These practices underwrite “rituals of power” that deploy “universal standards of truth and meaning” to ground and naturalize order (Ashley, 1989: 261, 264). Similarly, Karen Litfin (1994: 13) argues that knowledgeable practices shape environmental discourses. For her, discursive practices were not “free-floating,” but “embodied in technical processes, institutions, and pedagogical forms that impose and maintain them” (Litfin, 1994: 190). In showing how knowledgeable practices shaped ozone politics, Litfin prefigured themes in the new literature on epistemic practices.

Jens Bartelson’s (1995) *Genealogy of Sovereignty* went further. The book traces the emergence of sovereignty to the rise of *mathesis*, an epistemic discursive formation that promotes “problem-solving analysis in the knowledgeable practice of statecraft” (Bartelson, 1995: 144). This formation constituted a particular regime of sovereignty and made possible a whole set of interest-based calculations. The *mathesis* episteme allowed the international system to be divided into a table of states, subdivided into their constituent parts:

if one possesses accurate knowledge of the size of a country, its natural resources and the size of the royal revenue, the number of its inhabitants and their natural inclinations, one simultaneously possesses a fair estimate of its military strength and hence of its interests. (Bartelson, 1995: 162)

Thus, in Bartelson’s account, knowledge constituted the very foundation of the international system, reorienting states to the calculation of interests instead of the quest for glory.

By 1990, Haas himself came to see knowledge in discursive terms as “a shaper of worldviews” in which “the intellectual commitments of the seventeenth-century scientists and mathematicians penetrated the way political economists and their disciples in governments began to see the world” (Haas, 1990: 22). For Haas, as for Ruggie, Ashley, Litfin, Bartelson, and others, knowledge could operate as a form of productive power.¹² Bueger (2014: 45–47) suggests that these Foucauldian studies shifted the unit of analysis from subjects to discourses. However, the central aim of these studies was to show how epistemes and knowledgeable practices shaped the subjectivities of policymakers and states.

In another intellectual tradition, rationalists drew on Haas’s insights to theorize the role of information and common knowledge in game-theoretic analyses of international politics. To the rationalist scholars challenging neorealism, Haas was cited and engaged as a fellow liberal interested in how interdependence produced regimes and dampened the struggle for power. For example, in *After Hegemony*, Keohane (1984: 132; cf. Goldstein, 1989) cites Haas when he argues that interests are malleable and can be changed by a process of learning. Moreover, he suggests that “information,” understood as common knowledge, can help establish property rights and reduce transaction costs, thereby facilitating cooperation (Keohane, 1984: 87).

In the hands of Kenneth Oye (1985), this concession was translated into an argument with important similarities to the Foucauldian idea that knowledge is a form of

productive power. Oye argues that states can reach cooperative outcomes in competitive distributional games like the Prisoners' Dilemma if they find a way to alter pay-off structures, lengthen the shadow of the future, or reduce the number of players. Famously, Oye shows how institutions perform these tasks. However, he also draws on Haas and Ruggie to theorize how expert knowledge can serve each of these functions. First, he argues that Ruggie's article on embedded liberalism demonstrates "how the diffusion of liberal economic ideas increased the perceived benefits of mutual economic openness over mutual closure (CC-DD), and diminished the perceived rewards from asymmetric defection relative to asymmetric cooperation (DC-CD)" (Oye, 1985: 5).¹³ Second, experts can lengthen the shadow of the future by providing information about past interactions. Experts can also facilitate cooperation by clarifying what counts as cooperation and defection and thereby facilitate reciprocity. Finally, experts within institutions can reduce the number of players by defining membership and excluding some states from the games.

Moreover, Oye argues that expert knowledge can transform competitive cooperation games into games of harmony. For Oye, Haas's work shows that scientists facilitate cooperation by creating "cognitive congruence": "The diffusion of common conceptions of the nature and effects of technology enhanced perceived gains from cooperation and diminished perceived gains from defection, and may have transformed some Prisoners' Dilemmas into Harmony" (Oye, 1985: 9).¹⁴ In a similar example, Oye (1985: 6) goes even further:

pure economic liberals — more common on economics faculties than in trade ministries — believe that unrequited openness is preferable to unilateral protection. Irrespective of the actions of others, a liberal believes that openness is best. In a world of pure liberals, policy coordination will not be necessary to the realization of openness.

Oye's argument here mirrors the Foucauldian claim that epistemes constitute international politics. First, in Oye, experts not only grease the wheels of cooperation, but structure the game itself by altering preferences. Thus, epistemic ideas can determine the structure of the game, and even if a game needs to be played in the first place. If knowledge alters perceptions and understandings on a fundamental level, it may not just help states realize pre-existing joint gains, but may *produce* their interests and thereby construct or create joint gains. If knowledge can influence what kind of game states play or if they play at all, then it has an autonomous power to constitute politics. His argument that experts can create games of harmony reminds us that not all interesting outcomes in international politics can be accounted for within theories of cooperation. Some of the most powerful outcomes in international politics are in harmony and deadlock games, where interests diverge or converge because of the underlying structures of ideas.

However, other rationalist strands dismissed or downplayed the role of knowledge by resurrecting the old realist notion that knowledge was merely particular ideology that served to veil interests. Morrow's (1994) analysis of knowledge as "cheap talk" formalizes this claim. In cheap-talk games, players can send costless signals to each other. Morrow (1994: 390) suggests that this formalizes "how regimes help actors share information and knowledge to create shared understandings of their situation," as laid out by

Haas and Ruggie. Morrow (1994: 400) interprets knowledge broadly “in the way Ernst Haas does ... [as] a guide to the solution that is better for the actors.” He cites Peter Haas’s work on Mediterranean environmental cooperation as an example of how knowledge can facilitate coordination by creating “common views on what regulations are needed and how national policies should enact those regulations” (Morrow, 1994: 411). However, in the end, the results of the analysis are more about the effects of communication than about knowledge per se: actors send messages to one another to figure out what kind of game they are in (Morrow, 1994: 408). Here, knowledge merely helps actors realize pre-existing joint gains in coordination games.

Morrow (1994: 405) shows that while information can help solve coordination games, in games that combine coordination and distributional problems, information cannot eliminate barriers to cooperation. In coordination games without distributional consequences, honest communication is possible. However, where distribution and coordination come together, actors cannot trust the signals they receive, and barriers to cooperation persist. So, knowledge is limited to facilitating coordination or to functioning strategically as cheap talk. Here, as in Mannheim’s analysis of the politics of ideology, Morrow’s actors must regard others with suspicion and distrust. Whereas in Mannheim’s analysis, knowledge and public utterances are suspect because they are shaped by class interests, in Morrow, the knowledge an actor shares with others is suspect because they have an explicit interest in giving false information. Mannheim is not cited here, but what Morrow’s work shows is the persistence of a subject-centered frame in which it is natural to be suspicious of the knowledge possessed by agents.

It was in this context that Peter Haas reconstructed and refined the neofunctionalist argument within the epistemic communities framework. Just as Ernst Haas had worked against the realist view of knowledge as particular ideology, Peter Haas (1992b), Emanuel Adler (1992), and others set out to demonstrate the value of knowledge against the view of knowledge as ideology or cheap talk. How can knowledge matter when states face incentives to believe and spread information that conforms to their interests? Haas (1992a: 2) contends that “epistemic communities” or “networks of knowledge-based experts” play an important role “in articulating the cause-and-effect relationships of complex problems, helping states identify their interests, framing the issues for collective debate, proposing specific policies, and identifying salient points for negotiation.” In the ozone case, Haas (1992b) shows how academic and corporate scientists, IO bureaucrats, and US government officials worked together to produce authoritative reports that convinced states of the importance of producing a robust regime to regulate the chlorofluorocarbons that cause ozone depletion. This argument was largely consistent with the rationalist arguments put forward by Keohane and Oye.

While there was disagreement between Haas’s followers and skeptics like Morrow, each of these arguments worked within the subject-centered frame articulated by Mannheim. The skeptics posited that knowledge merely hid interests, but they remained focused on explaining the behavior of subjects. The Haasians demonstrated the importance of knowledge as more than particular ideology in the face of the skeptical critique, but they did not fundamentally shift the empirical or conceptual categories of the sociology of knowledge in IR. They still operated in the Mannheimian

mode because they traced the direct influence of knowledge on the beliefs and practices of subjects.

The turn to objects

Over the last decade, a diverse group of scholars has expanded the study of knowledge and expertise by drawing on Bourdieu, Foucault, Latour, new materialism, and science and technology studies.¹⁵ This work provides new, fine-grained empirical analyses of the dynamics of knowledge. However, it is not immediately clear what this recent literature has added to IR theory since, as we saw, the literature in the 1980s and 1990s was already quite diverse. In this section, I argue that Bueger's contention that IR has moved from an actor-centric theory to a discursive and practical conception of knowledge actually understates the theoretical significance of some recent work.¹⁶ Building on Olaf Corry's (2013) articulation of an object-centered turn in IR, I contend that new approaches are most significant not when they simply shift the unit of analysis from actors and epistemes to practices, but when they challenge IR's subject-centered focus. Innovative studies foreground objects and, with them, how the space of the international is constituted and populated with common problems and imperatives. I see this as picking up Haas's neglected proposal to place the history and operations of technology-task-environments at the center of IR.

Objects are concatenations of knowledges, artifacts, physical phenomena, and practices that have been yoked together and constituted as an entity distinct from other objects, events, and actors.¹⁷ Anything might become a governance object provided it can be designated, rendered governable, and problematized (Corry, 2013: 87; Allan, 2017: 137–38). This conception of objects encompasses the focus of the new materialist literature — physical objects and artifacts — but the emphasis here is less on material things than on how such entities are yoked into malleable problems that can be governed by states and other international actors. Objects of global governance include the economy, economic development, the climate, gender, guns, drugs, human rights, terrorism, public health, and international trade. Such objects structure the fields in which international political action unfolds (Sending, 2015: 25). They serve as the orienting problems and focal points around which actors coalesce and interact.

This approach to objects builds on Michel Foucault's work on the formation of objects in *The Archaeology of Knowledge* (Foucault, 1972) and the *Lectures at the Collège de France* (Foucault, 2007, 2008). The Foucault that emerges from my reading of these texts is distinct from the Foucault that we were introduced to earlier. While those scholars drew on Foucault's concept of knowledgeable practices, here I show how Foucault integrated those practices into a study of epistemic objects. In *Archaeology*, Foucault revisits his earlier historical analyses of the epistemic objects madness, disease, and the human. He suggests that these studies placed too much faith in the existence of some real thing that lay beneath the epistemic objects (Foucault, 1972: 14–15, 46). Looking back, Foucault (1972: 48) now rejects the idea that some stable psychological phenomena might have served as “the ground, the foundation” for the history of madness. Instead, he seeks to theorize the conditions of possibility for the emergence of objects like madness in the first place (Foucault, 1972: 41–42).

On his conception, objects are formed systematically by discursive practices (Foucault, 1972: 49). That is, objects represent a “regularity of practice” rather than the unity of some static thing that imposes itself on discourse from the outside (Foucault, 1972: 79). Such objects have a dual relation to knowledge (Foucault, 2008: 2–18). On the one hand, they are formed by knowledgeable practices. On the other hand, the emergence of new objects makes possible new forms and domains of knowledge. For Foucault, as for Corry, the constitution of objects is important because new objects reconstitute the landscape of subject positions, knowledges, and practices. For example, in the *Lectures*, Foucault argues that transformations in the object “population” made possible new techniques of government and new forms of knowledge (political economy) that redefined modern politics (Foucault, 2007: 68–79, 106).

In his early historical analyses, Foucault treats discourse as largely textual.¹⁸ However, in *Archaeology*, Foucault (1972: 45) explicitly argues that objects are constituted by a set of relations “established between institutions, economic and social processes, behavioral patterns, systems of norms, techniques, types of classification, modes of characterization,” and so on. So, objects cannot be captured in purely ideational terms because they depend on material processes and practices. Along these lines, Mitchell has recently argued that objects like the economy are *made* from both ideational and material elements. Working with and against Foucault, Mitchell argues that “the economy” only emerged as an entity distinct from other entities like “society” and “nature” in the 1930s (Mitchell, 2002, 2005). It was then that transformations in economic theory, the availability of statistical data, colonial governance, and the circulation of money were brought together in a new entity. For Mitchell, this was not merely a process of naming something that already existed, but part of a larger process in which economic processes and monetary flows were constituted and shaped.

The production of this new object reoriented the political world along a “new axis” (Mitchell, 2002: 93). The making of the economy bolstered the authority of economists, who, in turn, designed tools to explain and manage the entity.¹⁹ The economy was thereby translated into a governance object that states and IOs sought to know and control. The economy could now underwrite new political imperatives, such as the necessity of promoting economic growth and international trade. Policies created on this basis further expanded and reconstituted the object’s constituent transaction flows and practices mapped by statistical and theoretical tools. Thus, objects are co-productions that emerge from the complex interaction of expert knowledge, political interventions, and everyday practices or transaction flows. As such, they are contingent and shifting entities, constituted and reconstituted through time.

In his highly original book *Constructing a Global Polity*, Corry (2013) generalizes the Foucauldian framework into a new image of the international system as a global polity centered on “governance objects.” For Corry, previous attempts to make sense of the complexity of global politics have failed because they inevitably rest on state-centric assumptions. Thus, they slide back into “anarchy-plus” and fail to adequately account for the messiness and multiplicity of international order. On the other hand, most theories that take complexity seriously are themselves messy and lack a simple image of the system that can form the basis of parsimonious insights (Corry, 2013: 1–6). In place of the anarchy assumption, Corry (2013: 86) posits the image of a series of actors (states, IOs,

non-governmental organizations (NGOs), etc.) oriented to a shared governance object. Corry's innovation here is to completely flatten the system, forcing us to reintroduce traditional theoretical elements like power, interest, and knowledge within a new object-centered frame.

Expertise and scientific knowledge are constituent elements of this theory because they underwrite the designation, translation, and problematization of objects as distinct entities subject to political interventions (Allan, 2017). For example, the work of Lövbrand and other Foucauldian studies of climate governance have shown how carbon dioxide has been translated into an abstract, commodified unit, "tonnes of CO₂-equivalent" (Corry, 2013: 9; Lövbrand et al., 2009; Oels, 2005). The creation of this and other epistemic objects contributes to the constitution of "the climate" itself as a distinct, governable entity. The climate can then be manipulated and controlled by neoliberal strategies such as the construction of carbon markets and the cultivation of carbon-conscious consumers. Knowledge and expertise play a central role in these processes: knowledge renders new phenomena and practices visible and is used to design rationalities and technologies of intervention (Lövbrand et al., 2009: 8).

Other IR scholars have arrived at the analysis of objects following Bourdieu. Madsen (2011) foregrounds objects in his application of Bourdieusian reflexive sociology to the global history of human rights. Madsen (2011: 262) argues that any attempt to explain the rise of human rights leads to the reflexive analysis of how a community of lawyers, scholars, and activists constituted the object "human rights." After all, entities such as "human rights" and "the international" alike are the product of political contestation over who gets to define and represent those objects. In Madsen's history, expert knowledge plays a central role not in constituting subjects, but in producing a new international political object, the bundle of principles and practices known now as human rights.

Sending's (2015) Bourdieusian analysis foregrounds the importance of contestation and competition in the process of constituting objects. On his account, there is "always some body of knowledge (scientifically produced or not) involved in claims about how to define and act on governance objects" (Sending, 2015: 8). Thus, all objects and their attendant orders are the product of some actors succeeding in "presenting their interests and attendant categories as natural and universal rather than arbitrary and particular" (Sending, 2015: 11; cf. Ashley, 1989: 258–259). Objects are linked to authoritative knowledge in an endogenous, iterative process whereby objects define the world in such a way as to confer authority on some categories, actions, and actors rather than others (Sending, 2015: 28). Thus, the construction of objects has real power because it transforms the landscape of reality *and* the landscape of authority that structures political contestation (Sending, 2015: 41–54).

IR theorists inspired by Latour and the new materialists have also turned from subjects to objects (Aradau, 2010; Du Plessis, 2017; Leander, 2013; Mayer and Acuto, 2015; Salter, 2014; Schouten, 2013; Shah, 2017). These studies focus on physical phenomena, technologies, artifacts, and infrastructures to highlight the agency and autonomy of material things. Such arguments are a useful corrective to ideational or discursive arguments that ignore the properties of things and systems in themselves. However, an exclusive focus on material entities has limits as well. After all, when they play a role in global

politics, natural systems like the climate must have a hybrid character. To become objects of governance, entities must become bound up with knowledgeable practices that constitute those phenomena as problems for policymakers and publics (Allan, 2017).

In this vein, some new materialist work draws attention to how material things and processes combine with human knowledge to form hybrid configurations. For example, drawing on Karen Barad's Bohrian metaphysics, Aradau (2010: 499–500) argues that "[o]bjects do not pre-exist but are constituted through intra-action between different material-discursive practices." As such, the materiality of infrastructures "emerges in intra-action with material-discursive practices about the 'foundations' of society, spread of bio-threats, preparedness measures, medical knowledge, design and engineering expertise, and police and military expertise, as well as nodes, flows, soils, building materials, etc" (Aradau, 2010: 503). So, for Aradau, the governance and securitization of "critical infrastructure" in the War on Terror must be studied as a genealogy of how these diverse elements were brought together into a stable configuration.

However, some new materialist work has the potential to disrupt the anthropocentric terms of object analysis thus far. Du Plessis (2017), for example, argues that microbes have bordering effects that are independent of humans. That is, they have direct effects on the acts and dispositions of humans that do not pass through human knowledge *per se*. This raises the possibility that microbial DNA is information relevant to the constitution of international objects and patterns of behavior. New materialism may push us to expand the domain of knowledge beyond the human estate.

The turn to objects redefines the role of knowledge from serving as a source of subjective beliefs and purposes to acting as an element in the production of objects that structure the landscape of politics. Here, the analysis of objects is compatible with what Bueger (2014: 48) calls discursive and practical approaches to the study of global knowledge. However, not all such studies of practice make the shift from subjects to objects. While they contain new insights that follow from unpacking the black box of knowledge and expertise or decomposing macro-historical processes into their constituent elements, many of these studies proceed within the subject-centered, Mannheimian mode. The object-centered approach requires and builds on this idea that knowledge is bound up with the discourses and practices that constitute the world — but it goes further. It draws our attention to how knowledge combines with natural systems, socio-technical landscapes, and political alignments to structure wholes that are nonetheless fragmented and contingent.

In the subject-centered discourse, subjects possess knowledge *of* objects in the world. The turn to objects, by contrast, places knowledge *in* objects as a constituent element. On this account, objects like the climate are hybrid concatenations of physical phenomena (natural systems and entities), technologies (elements of energy systems), institutional contexts (rules and organizations), and knowledges (climate science, policy expertise). So, the study of objects draws on the idea that discourses and practices matter in international politics. However, the study of objects foregrounds how those elements are combined into stable configurations that constitute the landscape of problems and issues.²⁰

Another point of difference can be seen in how the two approaches define structure. The subject-centered view defines structures in terms of subjects and their relations. By

contrast, Corry (2013: 85) presents a conception of structure that begins with objects. Corry's idea of structure begins with an object around which actors are arranged and connected. He then translates this image into a break with the anarchy assumption by flattening traditional distinctions between anarchy and hierarchy, states and non-state actors, and so on. For him, the ordering principle of the global polity is not anarchy, but the orientation of multiple kinds of actors toward a common object. Corry (2013: 95) contends that a shared object orders the system because it "categorizes and organizes the elements in a system in a particular way." That is, it defines common practices and informs the rules that structure international orders (Corry, 2013: 91–92). In outlining these structuring effects, Corry focuses on the role of the object and its accompanying discursive frame. However, discourses are not the only elements that constitute objects and their ordering effects. As practice theorists and the new materialists would point out, natural systems, artifacts, techniques, and other elements also constitute objects and concomitant structures.

Building on Corry, we might say that the basic structure of the system is constituted by a "system-object." The basis of a system-object is an idea about what the space of the international is.²¹ As Corry (2013: 37) argues, a concept of the system makes a system real "in so far as the world is ordered through processes that constitute and order objects and subjects" as being in one kind of system rather than another. Prior to the emergence of the idea of the international in the 19th century, European relations were structured by an idea of *Europe* as a republic (Sending, 2015: 34–36). Subsequently, the object *international* was invoked by actors seeking to establish their authority (Sending, 2015: 41–54). More recently, the concept *global* has been invoked to legitimate IOs, non-state actors, and transnational projects (Corry, 2013: 100–105). Other non-Western systems were centered on alternative concepts. For example, Islamic polities from the 7th through the 12th century arranged their affairs around the concept of the Caliphate. Later, the Ottomans used the concept *nizam-i-alem* ("order of the world") to speak of international relations.²² The ancient East Asian system was built on the idea that China was at the center of *tanxia* ("all under heaven").

System concepts enter into configurations of knowledge, technology, power distribution, territoriality, practice, and institutional arrangements to form system-objects. System-objects underwrite inter-polity fields of action and competition. Each system-object implies a different ordering of international politics. For example, the *international* legitimates the centrality of nation-states, while *Europe* privileged transnational aristocratic norms and traditions. Within a coherent system, processes of contestation and production will determine which governance objects emerge to orient common action and interventions. So, systems are populated by a series of problems around which actors, knowledges, institutions, practices, technologies, and artifacts coalesce.

Conclusion

The history of knowledge in Western IR theory reveals four central ways in which expert knowledge has been theorized. First, realists saw knowledge as particular ideology and rationalists later reprised this as cheap talk. In this account, scientific and

expert knowledge is an unstable foundation for cooperation and order. Second, Haas argued that consensual, scientific knowledge could ground stable world orders by driving the convergence of interests. Third, Haas, Ruggie, Oye, and others theorized knowledge as an episteme that constituted not only interests, but basic representations of reality. These Mannheimian and Foucauldian approaches shared a focus on tracing how the production of knowledge in scientific and expert spheres entered into the political realm, thereby altering the ideas held by international subjects — states, IOs, and policymakers. Finally, recent approaches have combined insights from existing theories to reorient the study of knowledge to the constitution of international objects. These approaches step outside the subject-centered frame to show how expert knowledge is deployed in configurations of diverse elements. Those working from an object-centered approach still need to show how their approach can address the classic questions of agency, power, policymaking, conflict, and cooperation. Nonetheless, the object-centered view provides an exciting new terrain for theorizing.

One important implication is that the object-centered view entails a new concept of international structure on which actors are united into a system or field when they orient themselves to the same object. Thus, the realm of the international is constituted by the production of system-objects. What this means is that elements of Waltz's (1979) structure — units and ordering principles — are, in part, constituted by the system-object and its concomitant elements. The central question here is how the dynamic, ongoing constitution of system-objects has persistent structuring effects that produce a stable system. This alternative systems theory would have to be worked out in a research program on the historical constitution of international systems. Such a program would of necessity have to compare how different system-objects have played a role in constituting inter-polity systems throughout world history.

Second, the turn to objects presents a new way of linking the micro-, meso-, and macro-level dynamics of knowledge into a coherent theoretical framework. Macro-level phenomena like the economy or the international become neither purely analytical nor spatial entities, but historically constituted fields built around objects. These fields structure action for micro- (individual) and meso-level (organizational and institutional) actors. However, macro-level objects are themselves continuously produced from the yoking together of micro- and meso-level activities. So, in order to understand either agents or structures, we need to look at the dynamic processes of object-constitution that bring those agents together into a coherent field in the first place. In such an analysis, the study of subjects has an important role, but it is subordinated to the study of how subjects participate in the configuration of entities. For example, the interests and purposes of the United States in making the international economy in the post-Second World War era are still of paramount importance. However, the point is that we cannot understand those interests and purposes except in reference to the production of the object in the first place.

Third, the turn to objects foregrounds a distinct set of normative issues and policy prescriptions. Haas's ethical-political views were animated by the belief that consensual knowledge drives international policy change over the long run (e.g. Haas, 1975: 849–852; cf. Ruggie et al., 2005: 286). On the subject-centered image, the world can be improved by bringing actors' beliefs into line with reality. Although Haas saw the

process by which knowledge could shape beliefs for the better as nonlinear and complex, he nonetheless believed that a better understanding of problems would force political action. In Haas's terminology, political elites and experts would come together in a process of learning that improved policy.

By contrast, the object-centered view does not posit that change in knowledge will drive subjects to change. Instead, on the object-centered view, policy emerges from the dynamic interaction of object-constitution and subject-formation (Neumann and Sending, 2010; Sending, 2015). Each of these is, in turn, a configuration of knowledges, technologies, natural systems, political interests, international rules, and so on. Problems in politics arise not from the lack of knowledge about reality, but from a specific configuration of things. The solution is less to make subjects believe new things than it is to rearrange the elements to destabilize political traps, realign interested actors, make new possibilities seem more obvious, or introduce new forces. That is, the world is changed by remaking the configurations of elements that constitute it.

Finally, the turn to and historicization of objects complicates the epistemological subject-object distinction. Recent work by Madsen, Corry, and Sending does not eliminate this distinction between observer and observed. Rather, it transforms it into an empirical question in which the role of academic knowledge in the constitution of objects can be empirically traced. On the new view, the very objects of study (the international, the economy, etc.) are, in part, produced by efforts to define and stabilize those objects in academic knowledge. This returns IR theory to the conception of observer and observed held by Carr, Morgenthau, and Haas. They, like the more recent view, held a more complex image on which observers could shape the knowledge that informed the processes they studied. As Molloy (2006: 48) puts it, for both Carr and Morgenthau, the "academic observer is so rooted in the supposed 'object' of IR that he becomes part of the object in terms of his engagement of it." Thus, the recent reflexive turn is not a departure from IR, but a return to IR as practiced by some of its ablest articulators (Levine, 2012).

The object-centered approach thereby foregrounds the reflexive role of IR in shaping its object, international politics, from *within* its empirical and methodological orientation. In short, IR theory itself has a role in the constitution of "the international" and its various governance objects. Here, reflexivity is not an afterthought or an ethical-political constraint to be imposed from outside. Rather, it arises from efforts to trace how knowledge has become bound up in the constitution of the world (Hamati-Ataya, 2012: 681). IR theorists must become attentive to the ways in which IR theory participates in the definition and constitution of its objects (e.g. Guilhot, 2005). It is hard to say, prior to a careful analysis of the effects of IR theory on its objects, precisely what care, if any, IR theorists need take in the realm of theory as a consequence.

Acknowledgments

I would like to thank Olaf Corry, Daniel Levine, Nisha Shah, Sam Chambers, Peter Haas, Eva Lövbrand, Maximilian Mayer, Ole Jacob Sending, and two anonymous reviewers for comments and conversations that improved the paper. I am indebted to Bill Connolly who recommended I return to Mannheim. The historical part of the paper began as a graduate seminar in which Kavi Abraham, Tristan Klingelhöfer, Jarrett Olivo, Tim Vasko, and Jonathan White helped me work out some of the arguments.

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Notes

1. For reviews, see Cross (2013), Haas (2014), Mayer, Carpes, and Knoblich (2014), and Bueger (2014).
2. This builds on a suggestion by Shilliam (2014). For recent articulations of the sociology of knowledge in IR, see the special issue following Adler-Nissen and Kropp (2015).
3. I am grateful to Daniel Levine for this formulation.
4. My claim here is less that many IR theorists were faithful disciples of Mannheim than that Mannheim distilled the central ontological and epistemological issues that have dominated social-scientific thought since Weber's response to Marx. From this vantage point, Mannheim and IR theories of knowledge are both shaped by a persistent underlying discourse.
5. For a full account of Mannheim's influence on Carr, see Jones (1998: 127–143).
6. My reading here is slightly different from Jones (1998: 127) and Gismondi (2007: 138). Jones and Gismondi suggest that Carr reads utopianism as ideology, but as I read him, Carr portrays liberal rationalism as both ideology (because it hides power realities) and utopian (because it posits an unrealistic program). It makes more sense to say he conflates the two concepts.
7. Morgenthau (2006 [1948]) only cites Mannheim explicitly in *Politics Among Nations*, but Frei shows the Mannheimian influence on the earlier work as well (see also Breiner, 2014).
8. As Shilliam (2014: 352) points out, this central tenet of IR constructivism entered from the sociology of knowledge.
9. On relativism in Mannheim, see Molloy (2006: 71) and McCourt (2011: 53–55).
10. For a related argument about control over experts, see Johnson (1975).
11. Haas's (1975: 871) full definition is: "a cluster or bundle of separate technologies linked by political actors in a single program of action on the supposition that the pieces somehow cohere for purposes of optimal utilization."
12. On productive power, see Barnett and Duvall (2005). For similar arguments, see Adler and Bernstein (2005) and Barnett and Finnemore (2004).
13. For a similar argument with a nuanced position on knowledge, see Simmons and Elkins (2004).
14. Oye references Haas, Williams, and Babai (1977).
15. For works drawing on Bourdieu, see Berling (2017), Hughes (2015), Madsen (2011), and Sending (2015). For works inspired by Foucauldian governmentality studies, see Lövbrand, Stripple, and Wiman (2009) and Neumann and Sending (2010). For applications of Latour and Actor-Network Theory, see Aradau (2010), Mayer (2012), Mayer and Acuto (2015), and Porter (2014). For new materialist perspectives, see Aradau (2010), Du Plessis (2017), Leander (2013), Schouten (2013), Salter (2014), and Shah (2017). For a review of science and technology studies applications, see Mayer, Carpes, and Knoblich (2014).
16. The key problem, I suggest, stems from Bueger's conflation of the move to practices with the move to arrangements. The former is subject-centered; the latter is part of a much deeper ontological challenge than the move to practices.
17. See Corry (2013: 87). This definition contains many similar elements to Bueger's (2014: 48) definition of practices. However, the focus there is on how all these elements shape behavior (i.e. subject-centered analysis).
18. See Foucault's (1972: 71–72) autocritique of his early work in *Archaeology*.
19. For similar views of structural effects, see Foucault (2007: 76–77) and Sending (2015: 11–13).
20. For a related account, see Eyal (2013).

21. On spatial concepts of the international, see Shah (2012).
22. I am indebted to Ayşe Zarakol for introducing me to his concept.

References

- Adler E (1992) The emergence of cooperation: National epistemic communities and the international evolution of the idea of nuclear arms control. *International Organization* 46(1): 101–146.
- Adler E and Bernstein S (2005) Knowledge in power: The epistemic construction of global governance. In: Barnett M and Duvall R (eds) *Power in Global Governance*. Cambridge: Cambridge University Press, pp. 294–318.
- Adler-Nissen R and Kropp K (2015) A sociology of knowledge approach to European integration: Four analytical principles. *Journal of European Integration* 37(2): 155–173.
- Allan BB (2017) Producing the climate: States, scientists, and the constitution of global governance objects. *International Organization* 71(1): 131–162.
- Aradau C (2010) Security that matters: Critical infrastructure and objects of protection. *Security Dialogue* 41(5): 491–514.
- Ashley RK (1989) Imposing international purpose: Notes on a problematic of governance. In: Czempiel EO and Rosenau J (eds) *Global Changes and Theoretical Challenges: Approaches to World Politics for the 1990s*. Lexington, MA: Lexington Books, pp. 251–290.
- Barnett M and Duvall R (2005) Power in global governance. In: Barnett M and Duvall R (eds) *Power in Global Governance*. Cambridge: Cambridge University Press.
- Barnett M and Finnemore M (2004) *Rules for the World*. Ithaca, NY: Cornell University Press.
- Bartelson J (1995) *Genealogy of Sovereignty*. Cambridge: Cambridge University Press.
- Berling TV (2017) Stabilizing a crisis as an object of knowledge: How the NATO Defense College made sense of the emerging crises in Libya and Ukraine. In: Leander A and Waever O (eds) *The Production of Expert Ignorance: Assembling International Conflict Expertise*. London: Routledge.
- Breiner P (2014) Translating Max Weber: Exile attempts to forge a new political science. In: Roesch F (ed.) *Emigré Scholars and the Genesis of International Relations: A European Discipline in America?* New York: Palgrave Macmillan, pp. 40–58.
- Bueger C (2014) From expert communities to epistemic arrangements: Situating expertise in international relations. In: Mayer M, Carpes M and Knoblich R (eds) *The Global Politics of Science and Technology, Vol. 1*. Berlin: Springer-Verlag, pp. 40–54.
- Carr EH (1939) *The Twenty Years' Crisis*. New York, NY: St. Martin's Press.
- Corry O (2013) *Constructing a Global Polity: Theory, Discourse and Governance*. New York, NY: Palgrave MacMillan.
- Cross MKD (2013) Rethinking epistemic communities twenty years later. *Review of International Studies* 39(1): 137–160.
- Du Plessis G (2017) When pathogens determine the territory: Toward a concept of non-human borders. *European Journal of International Relations* Epub ahead of print, 8 June. DOI: 10.1177/1354066117710998.
- Eyal G (2013) For a sociology of expertise: The social origins of the autism epidemic. *American Journal of Sociology* 118(4): 863–907.
- Foucault M (1972) *The Archaeology of Knowledge and the Discourse on Language* (trans. Sheridan Smith AM). New York, NY: Pantheon.
- Foucault M (2007) *Security, Territory, Population: Lectures at the Collège de France, 1977–78* (trans. Burchell G). New York, NY: Palgrave Macmillan.

- Foucault M (2008) *The Birth of Biopolitics: Lectures at the Collège de France, 1978–79* (trans. Burchell G). New York, NY: Palgrave Macmillan.
- Frei C (2001) *Hans J. Morgenthau: An Intellectual Biography*. Baton Rouge, LA: Louisiana State University Press.
- Gismondi MD (2007) *Ethics, Liberalism and Realism in International Relations*. London: Routledge.
- Goldstein J (1989) The impact of ideas on trade policy: The origins of U.S. agricultural and manufacturing policies. *International Organization* 43(1): 31–71.
- Guilhot N (2005) *The Democracy Makers: Human Rights and International Order*. New York, NY: Columbia University Press.
- Guilhot N (2011) The realist gambit: Postwar American political science. In: Guilhot N (ed.) *The Invention of International Relations Theory: Realism, the Rockefeller Foundation, and the 1954 Conference on Theory*. New York, NY: Columbia University Press, pp. 128–161.
- Haas EB (1953) The balance of power: Prescription, concept, or propaganda. *World Politics* 4(4): 422–477.
- Haas EB (1964) *Beyond the Nation-State: Functionalism and International Organization*. Stanford, CA: Stanford University Press.
- Haas EB (1975) Is there a hole in the whole? Knowledge, technology, interdependence and the construction of international regimes. *International Organization* 39(3): 827–876.
- Haas EB (1976) Turbulent fields and the theory of regional integration. *International Organization* 40(1): 173–212.
- Haas EB (1980) Why collaborate? Issue-linkage and international regimes. *World Politics* 32(3): 357–405.
- Haas EB (1982) Words can hurt you; or, who said what to whom about regimes. *International Organization* 36(2): 207–243.
- Haas EB (1990) *When Knowledge is Power: Three Models of Change in International Organizations*. Berkeley, CA: University of California Press.
- Haas EB, Williams MP and Babai D (1977) *Scientists and World Order: The Uses of Technical Knowledge in International Organizations*. Berkeley, CA: University of California Press.
- Haas PM (1992a) Introduction: Epistemic communities and international policy coordination. *International Organization* 46(1): 1–35.
- Haas PM (1992b) Banning chlorofluorocarbons: Epistemic community efforts to protect stratospheric ozone. *International Organization* 46(1): 187–224.
- Haas PM (2014) Ideas, experts and governance. In: Ambrus M, Arts K, Hey E, et al. (eds) *The Role of 'Experts' in International Decision-Making: Advisors, Decision-Makers or Irrelevant*. Cambridge: Cambridge University Press, pp. 19–43.
- Hamati-Ataya I (2012) Reflectivity, reflexivity, reflexivism: IR's "reflexive turn" — and beyond. *European Journal of International Relations* 19(4): 669–694.
- Hughes H (2015) Bourdieu and the IPCC's symbolic power. *Global Environmental Politics* 15(4): 85–104.
- Johnson B (1975) Technocrats and the management of international fisheries. *International Organization* 29(3): 745–770.
- Jones C (1998) *E.H. Carr and International Relations: A Duty to Lie*. Cambridge: Cambridge University Press.
- Keohane RO (1984) *After Hegemony*. Princeton, NJ: Princeton University Press.
- Leander A (2013) Technological agency in the co-constitution of legal expertise and the US drone program. *Leiden Journal of International Law* 26: 811–831.
- Levine D (2012) *Recovering International Relations*. Oxford: Oxford University Press.

- Levine D and Barder A (2014) The closing of the American mind: “American School” International Relations and the state of grand theory. *European Journal of International Relations* 20(4): 863–888.
- Litfin K (1994) *Ozone Discourses: Science and Politics in Global Environmental Cooperation*. New York, NY: Columbia University Press.
- Lövbrand E, Stripple J and Wiman B (2009) Earth system governmentality: Reflections on science in the Anthropocene. *Global Environmental Change* 19: 7–13.
- McCourt D (2011) The “problem of generations” revisited: Karl Mannheim and the sociology of knowledge in International Relations. In: Steele BJ and Acuff JM (eds) *Theory and Application of the “Generation” in International Relations*. New York, NY: Palgrave Macmillan, pp. 47–70.
- Madsen MR (2011) Reflexivity and the construction of the international object: The case of human rights. *International Political Sociology* 5: 259–275.
- Mannheim K (1997 [1936]) *Collected Works of Karl Mannheim: Volume 1, Ideology and Utopia* (trans. Wirth L). London: Routledge.
- Mayer M (2012) Chaotic climate change and security. *International Political Sociology* 6: 165–185.
- Mayer M and Acuto M (2015) The global governance of large technical systems. *Millennium* 43(2): 660–683.
- Mayer M, Carpes M and Knoblich R (2014) The global politics of science and technology: An introduction. In: Mayer M, Carpes M and Knoblich R (eds) *The Global Politics of Science and Technology, Vol. 1*. Berlin: Springer-Verlag, pp. 1–35.
- Mitchell T (2002) *Rule of Experts: Egypt, Techno-Politics, Modernity*. Berkeley, CA: University of California Press.
- Mitchell T (2005) Economists and the economy in the twentieth century. In: Steinmetz G (ed.) *The Politics of Method in the Human Sciences: Positivism and its Epistemological Others*. Durham: Duke University Press, pp. 126–141.
- Molloy S (2006) *The Hidden History of Realism: A Genealogy of Power Politics*. New York, NY: Palgrave Macmillan.
- Morgenthau HJ (1946) *Scientific Man versus Power Politics*. Chicago, IL: University of Chicago Press.
- Morgenthau HJ (2006 [1948]) *Politics Among Nations, Seventh Edition*. New York, NY: McGraw-Hill.
- Morrow JD (1994) Modeling the form of international cooperation: Distribution versus information. *International Organization* 48(3): 387–493.
- Neumann I and Sending OJ (2010) *Governing the Global Polity: Practice, Mentality, Rationality*. Ann Arbor, MI: University of Michigan Press.
- Oels A (2005) Rendering climate change governable: From biopower to advanced liberal government? *Journal of Environmental Policy & Planning* 7(3): 185–207.
- Oye KA (1985) Achieving cooperation under anarchy: Hypotheses and strategies. *World Politics* 38: 1–24.
- Porter T (2014) Making serious measures: Numerical indices, peer review, and transnational actor-networks. *Journal of International Relations and Development* 15: 532–557.
- Ruggie JG (1975) International responses to technology: Concepts and trends. *International Organization* 29(3): 557–583.
- Ruggie JG, Katzenstein PJ, Keohane RO, et al. (2005) Transformations in World Politics: The Intellectual Contributions of Ernst B. Haas. *Annual Review of Political Science* 8: 271–96.
- Salter M (ed.) (2014) *Making Things International I: Circulation*. Minneapolis, MN: University of Minnesota Press.

- Schouten P (2013) The materiality of state failure: Social contract theory, infrastructure and governmental power in Congo. *Millennium* 41(3): 553–574.
- Sending OJ (2015) *The Politics of Expertise: Competing for Authority in Global Governance*. Ann Arbor, MI: University of Michigan Press.
- Shah N (2012) The territorial trap of the territorial trap: Global transformation and the problem of the state's two territories. *International Political Sociology* 6: 57–76.
- Shah N (2017) Gunning for war: Infantry rifles and the calibration of lethal force. *Critical Studies on Security*. Epub ahead of print. DOI: 10.1080/21624887.2017.1330600.
- Shilliam R (2014) “Open the gates Mek we repatriate”: Caribbean slavery, constructivism, and hermeneutic tensions. *International Theory* 6(2): 349–372.
- Shils E (1995) Karl Mannheim. *The American Scholar* 64(2): 221–235.
- Simmons B and Elkins Z (2004) The globalization of liberalization: Policy diffusion in the international political economy. *American Political Science Review* 98(1): 171–189.
- Waltz K (1979) *Theory of International Politics*. New York, NY: McGraw Hill.
- Williams MC (2005) *The Realist Tradition and the Limits of International Relations*. Cambridge: Cambridge University Press.

Author biography

Bentley B. Allan is Assistant Professor of Political Science at Johns Hopkins University, USA.