Making Things Known: Epistemic Practices, the United Nations, and the Translation of Piracy

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How are international phenomena rendered knowable? By which means and practical devices is international knowledge generated? In this article, I draw on the case of contemporary maritime piracy to introduce a research framework that allows these questions to be addressed. Arguing that the practices of international knowledge generation are poorly understood, I show how concepts from science and technology studies provide the tools to study these practices empirically. Relying on the practice theory of Karin Knorr Cetina, I introduce the concepts of epistemic infrastructures, epistemic practice, and laboratories and demonstrate how they facilitate interesting insights on knowledge generation. I investigate three “archetypes” of epistemic practices in detail and show how these generate knowledge about piracy for the United Nations. The three archetypes are the quantification practices of the International Maritime Organization, the interpretation work of a monitoring group and the network of a special adviser. The article introduces an innovative agenda for studying knowledge generation in international relations by focusing on the practical epistemic infrastructures, which maintain knowledge about international phenomena.

Constructivist international relations (IR) theorists have pointed to the importance of international organizations (IOs) in producing and disseminating knowledge, but they have rarely focused on how knowledge production unfolds in practice. Classically, scholars such as Haas (1975) or Galtung (1986) have scrutinized the epistemic dimension of IOs such as the United Nations. Whereas Haas (1975) understood IOs as combinations of science, technology, and politics intended to manage problems of interdependency, Galtung (1986:1) understood them as “enormous research conglomerate[s],” which are “trying to process inputs about the empirical world (data, theories, values) into such outputs as background papers, documents, etc.” This classical argument, which understands IOs as a mixture of research and political organizations, has been further developed in several strands of contemporary literature. Works on epistemic authority demonstrate that IO secretariats and international administrations become autonomous actors by developing expertise in a distinct issue domain (Barnett and Finnemore 2004). Research has shown that IOs organize, or are influenced by, external knowledgeable communities, such as epistemic communities (Weiss, Carayannis, and Jolly 2009; Cross 2012). Studies drawing on organization theory have observed that IOs increasingly become learning organizations, significantly
expanding their research activities (Benner and Rotmann 2008; Campbell 2008). Research drawing on the Foucauldian concept of governmentality argues that IOs are entities governing through their knowledge production activities, such as the production of indicators and indices (Löwenheim 2008; Jaeger 2010). Thus, constructivist research has made a powerful case that the knowledge produced by IOs matters and that it has an effect on how global issues are governed. The theoretical argument of why knowledge matters is well advanced. The questions of how international phenomena are made knowable and which practices of knowledge generation underpin international policy processes continue to be underexplored.

In this article, I argue for a substantive focus on the practices of producing international knowledge, drawing on concepts from science and technology studies (STS). STS has considerably advanced our understanding of how knowledge is generated in practice.1 Yet, insights from this field have rarely been considered in IR and are underutilized in understanding the practices of knowledge generation which produce the objects and problems faced by international policymaking. STS has primarily investigated how the natural sciences as one social domain produce knowledge in sites such as laboratories. The toolbox of STS and its focus on the infrastructures and practices of knowledge generation is equally useful to understanding international knowledge.

Drawing on insights from STS, I argue for the study of “epistemic infrastructures” by which international phenomena and issues are produced and enacted. The concept of “epistemic infrastructures,” originally proposed by Knorr Cetina (2008), combines ideas from practice theory and Actor-Network Theory (ANT) to conceptualize the global flow of knowledge and the epistemic practices that sustain it. Such a conceptualization of knowledge production takes up contemporary debates within IR on a “practice” or “pragmatic turn” (Kratochwil 2009; Adler and Pouliot 2011) and the utility of ANT (Best and Walters 2013). I argue that the focus on epistemic practices and their infrastructures leads to a revised constructivist perspective on situating IOs as epistemic sites of world politics. Such a perspective entails two core moves: First, a shift toward the study of real-time knowledge production, and second, a comparative perspective on the types of practices by which knowledge is produced at different sites.

To develop this argument, I firstly advance a conceptual apparatus centered on the terms “epistemic infrastructure,” “epistemic practice,” and “laboratory.” I introduce the core ideas of Knorr Cetina’s practice theory and how it redirects research toward the investigation of practices and the sites in which they are sustained. I define an epistemic practice as a particular kind of practice that aims at constructing a distinct epistemic object and manipulating it. Then, I discuss the sites of epistemic practice. I develop the notion of “laboratories” as those sites of an epistemic infrastructure that are “nodal” or “obligatory passage points” through which knowledge has to pass. To make a case for the productivity of this perspective, I proceed by investigating an empirical case: the epistemic practices of contemporary piracy. The case of piracy is interesting because today’s IOs face a novel problem that they have not previously dealt with. Hence, we can observe which practices the organizations draw on to generate knowledge about an emerging problem in a situation of high uncertainty. My focus is on the United Nations Security Council (UNSC), and the starting point for the investigation is the question: How does the UNSC know piracy? I use UNSC resolutions on piracy as an empirical indicator to identify core components of the epistemic infrastructure of contemporary piracy and to trace the knowledge on which the resolutions rely. This leads us to a range of sites, which act as laboratories. I scrutinize in detail three kinds of epistemic practice: quantification, monitoring

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1See the overviews provided in Biagioli (1999) and Golinski (2005).
groups, and special advisers. I use the case to illustrate what kind of research the focus on epistemic infrastructures encourages and to outline an initial empirical typology of different epistemic practices, which can inspire future research.

**International Organizations, Epistemic Practices, and Laboratories**

Arguing for the importance of knowledge has been at the heart of constructivist IR scholarship. It has been used to show that actors other than states matter in international politics and to prove that various types of transnational communities, including norm entrepreneurs, advocacy coalitions, or epistemic communities (Adler 2005; Mayntz 2010), but also international administrations (Barnett and Finnemore 2004) have an influence through their knowledge. What unites these studies—despite their obvious diversity—is their underlying understanding of knowledge production. The argument is that an epistemic object, such as an international problem, can be understood by studying the interaction of these actors with states. As paradigmatically summarized by Antoniades (2003:29), “social reality is a ‘game’ of social interactions ... As long as ‘reality’ is mainly knowledge about this ‘reality,’ those players who possess and control knowledge have a dominant role in the game.”

This understanding follows the original formulation of constructivism in STS2 insofar as the assumption is that epistemic objects are dependent on the deliberations and interpretations of actors, on situational factors, on the political, rhetorical, and other strategies of actors, and potentially on their social and cognitive interests (Knorr Cetina 2008:40). The assumption is that the construction of knowledge is understood, if the underlying interactions are analyzed. Such a perspective has been dubbed a “constitutional logic,” given that knowledge, facts, norms, and rules are regarded as best understood by investigating constitutive causes and the elements that construct this object. Studies in IR that follow such a perspective show how a distinct actor influences the construction of an epistemic object and thereby plays a dominant role in the game. The focus is on the influence or power of actors in constructing knowledge. For instance, research drawing on the epistemic community framework, as summarized by Cross (2012), attempts to show under which conditions groups of actors that share knowledge exert influence in policymaking. The origin of the knowledge that these actors hold and how it is produced is left unexamined. Also, research on international administrations is primarily interested in how knowledge production leads to authority and allows administrations to influence the behavior of others (Barnett and Finnemore 2004). Again, the focus is on the influence of a distinct actor type. The intricacies of how the knowledge is actually produced, and how validity and certainty are constructed, are only of secondary relevance.

Research into IOs as learning organizations provides a partial remedy and has started to fill this gap. Analyzing knowledge generation through the concept of “learning,” Benner and Rotmann (2008), for instance, investigate the institutional structures by which the UN attempts to “learn” how to better manage peacebuilding operations. Campbell (2008) likewise studies the processes by which the UN secretariat intends to generate knowledge about peacebuilding success and failure. Such studies are important since they zoom in on processes of knowledge generation and reveal the often very small units that are crucial in the production of knowledge. These studies are, however, limited in that they investigate institutions rather than the actions and practices of knowledge production. Moreover, they take an inward-looking perspective. They study how

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knowledge is generated within the secretariat for the secretariat, rather than investigating how knowledge travels beyond the administration.

From Interactionism to Practice: Knorr Cetina’s Theory of Practice

Research in STS offers an alternative understanding of knowledge production that is based on practice theory. Such an understanding shifts the perspective from actors, their interaction and influence, toward the practical infrastructures by which knowledge is produced, validated, and maintained. The case that practice theory offers innovative insights for IR theory has already been made by, among others, Adler and Pouliot (2011). As they argue, “a focus on international practices better accounts for the many faces of world politics—including power and security, trade and finance, strategy, institutions and organizations, resources, knowledge and discourse, etc.—in action, as part of a ‘doing’ in and on the world” (Adler and Pouliot 2011:2). The focus on practice has led to a flourishing research agenda, with a focus on the practices of diplomats, soldiers, or development workers.

Quite surprisingly, practice theory has thus far hardly been used to study the production of IR knowledge. This is astounding insofar as one of the main origins of practice theory is in STS and the attempt to study knowledge production. One reason for this negligence is that IR has come to a somewhat narrow understanding of practice theory, associating it mainly with the works of Pierre Bourdieu or Etienne Wenger. Practice theory, however, provides a broader account. It is, as Reckwitz (2002) suggests, a family of theories and includes other types of efforts (Nicolini 2013; Bueger and Gadinger 2014). In the following, I draw on the STS tradition of practice theory. This tradition is rooted in the laboratory studies of the 1980s; Karin Knorr Cetina, as well as advocates of ANT such as Bruno Latour, are the main protagonists. The core concern of these thinkers is in understanding the practices by which knowledge is produced, epistemic objects are made, and facts manufactured.

Knorr Cetina initially developed her version of practice theory (concisely summarized in Knorr Cetina 2001, 2008) to study the sciences (for example, Knorr Cetina 1999). However, the fact that knowledge creation and validation are seen as core drivers of many domains of social life (Knorr Cetina 2001) implies a significant widening of the perspective. Knorr Cetina points out that practice theory provides an alternative understanding to the interactionist understanding of knowledge generation. Instead of interaction, practice theory focuses on the level of the mundane functioning and everyday maintenance of orders of knowledge. Knowledge, facts, or meanings are then seen as invented and maintained in often fragile structures of meaning. For Knorr Cetina, it is these fragile structures or orders of meaning that is meant by practice. The assumption is that basic structures of social life can only be grasped on the level of real-time practices. Structures often contain contradictions and ruptures, which only work through continuous maintenance. They need to be enacted. Thus, the study of practice is the investigation of mundane maintenance and ordering structures, which make life possible and allow its working. All entities and structures depend on preserving, conserving, maintaining, and stabilizing processes, through which they can continue to exist.

3 Compare the summary in Adler and Pouliot (2011) and Bueger and Gadinger (2014).

4 Though scholars such as Kratochwil (2009) have pointed to the importance of understanding science as a social practice.

5 The list of authors of The Practice Turn in Contemporary Theory (Schatzki, Knorr Cetina, and Von Savigny 2001) is a telling indicator of how central STS have been for developing practice theory. At least half of the authors of the volume—hailed as launching the practice turn across the social sciences—develop their arguments from STS.
Knorr Cetina’s understanding of practice does not differ from others in that it considers different elements that a practice brings together. As summarized by Reckwitz (2002), this includes different forms of bodily and mental activities, all sorts of artifacts, technologies, and objects as well as their use. It includes sayings but also doings; representations, concepts and vocabularies, but also things and machines. These come together and are required to bring about and enact structures of meaning. Thus, practices in this sense are, as Nicolini (2013:219–220) points out, “not objects, they are not in the heads of people, and they are not stored in routines or programmes. Practices only exist to the extent that they are enacted and re-enacted.”

Knorr Cetina (2001:196) develops a “notion of practice that is more dynamic, creative, and constructive than the current definition of practice as rule-based routines or embodied skills suggests.” In contrast to practice theories, which dominate thinking in IR, such as that of Bourdieu, her intent is “to dissociate the notion of practice somewhat from its fixation on human dispositions and habits, and from the connotation of iterative procedural routines” (Knorr Cetina 2001:196). Instead of foregrounding an understanding of practices as “virtuous performances” (Kratochwil 2009:206)—as, for instance, developed by Adler and Pouliot (2011) for IR—Knorr Cetina (2001:196) proposes to “conceive of the backbone of practice in terms of a relational dynamics that extends itself into the future in creative and also in disruptive ways.” This relationist take on practice as a process of relating and ordering is closely associated to notions of practice developed by other STS scholars under the header of ANT.6 The core advantage of a focus on relations is that it allows scholars to be much more open to creativity, contingency, and change. This is partly a reaction to the criticism leveled against practice theory that it primarily focuses on reproduction (Duvall and Chowdhury 2011), and partly—as discussed further below—an acknowledgment of the principled unfolding and openness of practices of knowledge generation and validation.

Such a focus on the enactment of fragile structures of meaning also implies a transformed understanding of agency. Actors are not primarily constructors via their interaction, but they are carriers of practice, they enact practices. Indeed, practical orders of meaning produce agency, that is, the capacity to act and become an actor, and subject positions, that is, the possible spectrum of available actions in the first place. Such an understanding can be understood as a “distributed” form of agency, since agency is not a property of individuals but the effect of practice (Latour 2005; Bueger 2011).

Following Knorr Cetina’s understanding of practice leads us to the study of the permanent patterns and processes of the configuration of practical forms of order, as well as the instruments which enable and maintain these structures. From such a perspective, our understanding of IOs changes quite fundamentally, away from the traditional view of an IO as an arena in which different actors—including states, IO administrations, and transnational communities—interact, deliberate, or generate knowledge (Hurd 2011; Johnstone 2011). Thus, IOs are one instrument in maintaining and sustaining practical orders. An IO is a “site of practice,” in the sense of a dense space which hosts practices, maintains and sustains old ones, or invents new ones (Schatzki 2005). Students of global governance drawing on practice theory have started to sketch out such a notion. Sending and Neumann (2011), for instance, suggest analyzing IOs as practical configurations that have the capacity to structure other practices. Studies drawing on Foucauldian practice theory stress the role of IOs in disciplining other actors through practices such as benchmarking or indexing (Löwenheim 2008; Jaeger 2010). Srivastava (2013) suggests we read IOs as continuous “work in

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6See the discussion in Nexon and Pouliot (2013) as well as Bueger and Bethke (2014).
progress” and as what she calls an assemblage—that is, a structure that assembles different practices and materials. IOs can also be understood as sites that host different practices of doing politics, including the maintenance of sovereignty or the deliberation of problems (Bueger 2011). These sketches and projects share many of the intentions of the understanding of IOs that can be developed from Knorr Cetina’s work. Yet, my core interest is in knowledge generation, that is, to situate IOs in the global flow of knowledge and the enactment of structures of meaning, or epistemic infrastructures. Thus, what is required is an understanding of the specifics of epistemic practice, which goes beyond the more general discussion of theories of practice.

Epistemic Practices

What are epistemic practices? In the first instance, the concept of epistemic practices suggests that such practices produce and maintain (explicit) knowledge or facts. The term “epistemic” points to the infrastructure of procedures and projections, which produce reality. Epistemes are closely tied to “truth,” and the belief and trust in distinct objectifying and representing structures that allow for the possibility of universals. Such a perspective does not reject universals, but points out that to claim a universal, a plausible constructivist case must be made, that the universals rely on sustainable mechanisms of production and maintenance and on delocalizing practices, which produce universality (Knorr Cetina 2008; Latour 2010).

Isn’t any practice an epistemic practice? On the one hand, it can be argued that all social practices have an underlying episteme and produce reality. Moreover, epistemic practice is not (as epistemologists and some constructivists tend to suggest) confined to a clearly demarcated space, a subsystem, or a field, such as science. Studies of epistemic practices have long been limited to the study of “science,” as the sole epistemic authority in modern societies. Yet, it has increasingly become clear that science has always been just one of the many sites of epistemic practices (Knorr Cetina 2001). Analytical, strategic, and planning units in companies or bureaucracies, intelligence services and planning bodies, and expert commissions or courts are all sites that host and carry epistemic practices. Epistemic practices are widely dispersed and not specific to a distinct field or subsystem, such as science.

On the other side, if epistemic practice is not distinct from other practices, there would be little reason to develop the concept. I suggest that, in principle, any practice could be studied as an epistemic practice. Yet, I want to restrict the notion of epistemic practice to refer to a set or type of practice which can be embedded or nested in other practices but which has distinct characteristics. Epistemic practices are concerned about knowing a distinct (epistemic) object and aim at building universals out of particulars. Epistemic practices then aim at constructing a certain object. If seen from an IR perspective, such objects may include “the state,” “war,” “peace,” “terrorism,” “poverty,” or the empirical example I shall discuss in more detail: “piracy.” Epistemic practices aim at making generalizable claims about such objects, by drawing different particulars together, including data, facts, and claims. Such practices are also developing forms of inventions to manipulate these objects (for example, in claiming that democratization reduces the likelihood of war). Epistemic practices then construct objects and suggest or provide means of manipulating them. Yet, one of the core characteristics of epistemic objects is, as Knorr Cetina (2001:185) stresses, their lack of completeness. They are objects that continuously raise new questions, have to be re-evaluated and dealt with differently. As Knorr Cetina (2001:190) phrases it: “objects of knowledge appear to have the capacity to unfold indefinitely. They are more like open drawers filled with folders extend-
ing indefinitely into the depth of a dark closet... They continually acquire new properties and change the ones they have.” Epistemic practices likewise continuously unfold, the construction of objects is never complete, but requires ongoing maintenance work by which the elements required to construct the object are held together and temporarily stable representations of the object are produced.

Following Knorr Cetina (and other advocates of ANT), epistemic practices can be analyzed in at least three ways—that is, how epistemic practices “assemble,” “translate,” and “represent.” If epistemic practices create universals out of particulars, they assemble various entities and knowledge to create a more or less coherent whole. A first question is, therefore, what does an epistemic practice assemble, bring together, and relate to each other? Multiple connections between entities are created and grouped together, and hybrids between them are formed. With the concept of “translation,” science studies scholars have referred to the basic process by which two entities become related to each other (Callon 1980). Asking how epistemic practices translate foregrounds that knowing at distance is not a linear process, but that the knower (the subject) and the known (the object) enter into a distinct relationship (Knorr Cetina 2001:190).

To study epistemic practices as translation is to ask about the quality of the assembled relations. How are elements held together? What is required to do so? A translation process can include various sorts of material objects, instruments, or concepts that intermediate the relation between the knower and the known (Knorr Cetina 1999; Freeman 2009). Epistemic practices, however, also represent in the sense that what the practice produces and maintains is a distinct representation of the object. As Pels (2000) has suggested, representation can be understood as “presenting” that which is not immediately at hand, that which is absent and therefore needs to be introduced into the present situation, to be made (con)textually visible and available. As Latour proposed, representation is “acting at distance”: Information compromises between presence and absence by giving us the inscribed or symbolic form of something without having the thing itself (Latour 1987:219; Pels 2000:1). Representation thus means the presentation and importation of what falls outside the horizon of vision and immediate control into an actual microworld (Pels 2000:1). To study how epistemic practices represent is, then, to ask how they present the object in different contexts.

To gather an understanding of practices of knowledge generation, we can thus raise three kinds of analytical questions that provide different insights: How does the practice assemble, translate, and represent?

### Laboratories

Epistemic practices are tempo-spatially distributed; epistemic infrastructures bring together various sites. An epistemic object such as “war” or “piracy” is produced at different sites, including IOs, and will involve different kinds of epistemic practices. Yet, the majority of infrastructures will have sites, which are more important than others. There will be centers that exert control. Such sites are crucial for maintaining and sustaining the overall structure, and it is for these that STS scholars have developed the concept of “laboratory.”

Laboratories are sites of mediation that bring about and shape structures and which combine elements from different contexts. They assemble and bring together entities and processes with the objective of developing more enduring connections, which create a common biography and entail their own dynamics (Knorr Cetina 2008:64). They need to be understood as a local site, as a region or space of density in the social world, which is characterized through multiple connections,

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1I use the notion of laboratory in a metaphorical sense. For a critique of extending the notion in such a way, see Guggenheim (2012).
groupings, and hybridization of different understandings of the world and order. Laboratories produce dense packets of knowledge, of older knowledge and experience, and translate it into new knowledge. In laboratories, stabilized objects are created and sets of standardized practices are packaged to travel. Laboratories are sites creating, maintaining, and sustaining structure. Latour (1987, 2005) coined the notion of “centers of calculation” to speak about laboratories. Such centers were, for Latour, sites “where information is being created, collected, assembled, transcribed, transported to, simplified and juxtaposed in a single location, where everything that is relevant can be seen” (Law 2003:8). In such centers, traces can be explored which stand, in a single place, for a whole set of events and processes distributed through time and space. He suggested that there is a circular flow out from the center, which can be commands or demands, and a flow back to the center, in the forms of representations and other returns. The center becomes a center as the result of this asymmetrical configuration of a structure and the flows that move along it. Such an interpretation foregrounds the importance of laboratories in creating and maintaining social structures of meaning. And indeed, as Latour (2005:176–182) has advanced it, the concept of laboratories should be further generalized. He stresses that the notion of laboratories (and centers of calculation) has too often been restricted as covering primarily scientific activities. While science is a good example of how apparently small local sites can produce (macro) structural effects, such sites are not limited to science. He points to bureaucratic units or military command and control centers as other instances, which perform such functions. Indeed, it is exactly this argument which makes the notion of laboratories useful to understand IOs as sites within epistemic infrastructures and as potential candidates for organizing and hosting such laboratories.

To understand how international phenomena are rendered knowable, the practice-theoretical perspective within STS gives us a range of powerful analytical devices. The concepts of epistemic infrastructures as well as epistemic practices aim at grasping orders of meaning and the instruments that maintain it. While the notion of epistemic infrastructures refers to the larger formations that connect practices and sites to each other, the notion of epistemic practices conceptualizes the practical patterns of actions that keep the structure running through assembling, translating, and representing. The concept of laboratories points us to those sites which are the crucial nodal points in keeping an epistemic infrastructure running and which are the major hosts of epistemic practices. How can these concepts be used for empirical research? In the next section, I analyze the epistemic infrastructure of contemporary maritime piracy. I show how the epistemic object “piracy” is made known through different international laboratories and practices.

**The Epistemic Infrastructure of Contemporary Maritime Piracy**

Maritime piracy is an issue that gradually became a concern of the UN throughout the mid-2000s. In 2008, the UN Security Council (UNSC) issued its first ever resolution on piracy, addressing the situation off the coast of Somalia. This was followed by dozens of consecutive resolutions, since when the UNSC has been monitoring the problem. Although piracy is not a new problem as such, it was arguably entirely novel for the UN in general, as well as the UNSC specifically. Little was known about the problem of piracy, and the UN General Secretariat had no in-house expertise on the issue. Piracy, then, presents us with a case in which knowledge production was a pressing problem. Given the absence of established UNSC knowledge on piracy, the case provides a contemporary window into the epistemic infrastructure of an international problem and allows an analysis of the epistemic practices required to know it. To gather insights into
epistemic practices, my inquiry starts with the question: How does the UNSC know about piracy and its dynamics? Answering this query leads us to several instances of epistemic practices and laboratories of the epistemic infrastructure the UN is situated in.

Counter piracy has developed since 2008 into a “complex organizational field” in which various entities produce knowledge about piracy and compete with each other. Knowledge about piracy is produced in private security companies, in intelligence agencies, in embassies, in think tanks, in universities, and in the media. These are clearly part of the more general epistemic infrastructure of contemporary piracy, and they matter. Nevertheless, they are not formally authorized knowledge producers of the UN. To get a sense for authorized epistemic practices, a useful starting point is the documents produced in the UN and how they reference knowledge about piracy.

In the following passages taken from UNSC resolutions, we can see references to three types of epistemic practices: quarterly reporting by an IO, reporting from a monitoring group, and the report of a special adviser.

Expressing its concerns at the quarterly reports from the International Maritime Organization (IMO) since 2005, which provide evidence of continuing piracy and armed robbery. (UN Doc. S/Res/1816 (2008))

Welcoming the report of the Monitoring Group on Somalia of 20 November 2008 (S/2008/769), and noting the role piracy may play in financing embargo violations. (UN Doc. S/RES/1851 (2008))

Expressing its gratitude for the work done by the Special Adviser ... Mr. Jack Lang in order to explore new solutions ... and noting with appreciation the conclusions and proposals set forth in his report. (Un Doc. S/RES/1916 (2011))

These three instruments represent three different types of epistemic practices, which the UN relies on to render piracy knowable. Indeed, the practices are some of the archetypes of epistemic practices of the UN, which require close scrutiny. I discuss each epistemic practice in detail by documenting what the practice assembles, how it translates, and how it (re)presents. The first practice leads us to a laboratory, the IMO, which quantifies and calculates piracy. The second and the third practices lead us to more unstable structures of knowledge production, a monitoring group and the work of a special advisor. My discussion draws on data gathered in a larger research project on the governance of contemporary piracy. The reconstruction is based on the interpretation of the texts available, describing the practices and the documents produced by them, as well as interviews and conversations with practitioners in, and observers of, the respective epistemic practices.

Quantification: Centers of Calculating Piracy

The first kind of epistemic practices that the above passages reference are reports which “provide evidence” for trends in the development of piracy. The UNSC refers to the reports of the London-based IMO. The IMO collects incident reports and, since 1995, publishes data compilations on piracy in monthly, quarterly, and annual reports.

The IMO can be considered as a “center of calculation” in the Latourian sense. It collects information on piracy incidents and turns piracy into numbers.

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8 Bueger (2013a:102–105) provides an overview.

9 In the research project, the “Counter-Piracy Governance. A Praxiographic Analysis,” we conducted interviews with core counter-piracy practitioners from states and international organizations, as well as undertaking fieldwork at the core sites of counter-piracy governance.
It “quantifies” piracy (Porter 1994). Quantification involves a combination of scientific and administrative activities (Porter 1994:390). It represents an “aspiration to escape the bounds of locality and culture” and “promotes the fixing of conventions, the creation of stable entities that can be deployed across great distances” (Porter 1994:389). The numbers created in quantification can be used to make statements of global and regional trends as well as lead to representations such as statistical graphs.

The IMO maintains a complex system of reporting to quantify piracy. The underlying mechanism is that a vessel reports a successful or intended piracy attack to the ship owner. The ship owner reports the incident to the flag state authority (or another IO\textsuperscript{10}), which in turn forwards it to the IMO secretariat’s maritime safety division. Once the report has reached the secretariat, it is entered into a database (the Global Integrated Shipping Information System, GSIS). The database structures the incident data in a “tabulated format” (IMO 2009), agreed by the IMO’s Maritime Safety Committee. Through the tabulated format, the complexity of an incident is codified in nine categories and short pieces of information which then, in turn, can be stored. These incident data are published on the IMO website (GSIS database) and form the core of the monthly reports, which list all incidents in a given month in the format. The data are further processed in the preparation of quarterly and annual reports. Quarterly reports do not list single incident data, but provide the numbers of attacks sorted by geographical region. They detail the absolute numbers per region and their relative increase or decrease. They also include the numbers of seafarers affected by piracy and whether they were held hostage, injured, or violently assaulted and which weapons (for example, knives or rifles) were used. Data are presented in a graph, which compares regions to each other, as well as through regional maps, which show the location of all incidents in the reported period. Annual reports list the same information as quarterly reports, yet emphasize total numbers of all incidents across reporting periods, and also list the names of ships that were affected.

The IMO reports are thus at the end of a long translation chain, reducing the complexity of a piracy attack and codifying it. The IMO is at the center of a larger epistemic infrastructure that requires the participation of various actors, which are tasked to report in the format imposed by the IMO.\textsuperscript{11} The IMO reporting practice then assembles piratical activity, ship masters, ship owners, flag states, and other reporting centers. As discussed by Porter (1994), quantification has several effects. “Quantification has an important constructive role. With numbers one can often make new things, or at least transform old ones” (Porter 1994:398). The IMO reporting procedure turns piracy into a “quantitative entity” (Porter 1994), thereby abstracting its local complexities and presenting piratical activity as a single entity which can be represented in global figures or regional ones. Quantification also induces a general sense of certainty. Piracy can be known. Personalized judgments are denounced, and the measuring practice creates objectivity. Numbers and their representations, such as graphs and maps, are, as Porter (1994) argues, important devices to generate consensus across distances. Violence in the maritime world is represented in a single artifact, the IMO reports. This document can then be easily circulated across distance and reach sites such as the UNSC. Indeed, the IMO reports are frequently used to make claims that more action is required. To give but one example, the Secretary General (as recorded by the Department of Public Information, UN

\textsuperscript{10}This includes the IMB-ICC, NATO, the EU, as well as a range of regional reporting centers (see Bueger 2013a).

\textsuperscript{11}This status of the IMO is not uncontested. Indeed, other sites have attempted to become the center for incident data (Bueger 2013a:105).
Doc.GA/10940 (2010) referred to this data thus: “Calling the statistics ‘alarming’, he said that according to the IMO, the global figure for 2009 was 406—an increase of 100 over 2008.” Quantification here provides the basis for claims about piracy: to claim urgency for the problem (“alarming”) and that it is increasing in proportions. Numbers are not only important for coordinating activities, but they are also the basis for measuring whether counter-piracy measures are successful or not. The quarterly reports thus become tools by which the success of the joint efforts of the international community can be measured.

Monitoring Groups: Local Knowledge and Detective Work

A second type of epistemic practice by which knowledge about piracy is generated and translated to the UN is the reporting practice of a monitoring group. The UN Monitoring Group on Somalia (MGS) was established in 2003 and tasked to monitor the arms trade embargo against Somalia, in place since 1992 (UN Doc. S/RES/1519 (2003)). From 2007 on, the MGS has gradually extended its reporting on piracy and given it quite comprehensive treatment. The epistemic practice of the MGS is narrower in that it is geographically bound to produce only knowledge about Eastern African piracy. It translates piracy not by quantification but through interpretation, that is the interpretive analysis of a collective of experts. These experts engage in activities that resemble anthropological knowledge production or detective work. They follow leads, interrogate “local” sources, and then together interpret their results in order to produce a reporting document.

Compared to the IMO, the MGS is a less well-maintained center. It does not control the flow of knowledge to the same degree. It is dependent on other sites to exist, and it is limited temporarily. It is thus a more precarious and contingent epistemic practice. It is subject to constant renewal by the UNSC and its Somalia Sanctions Committee. The MGS submits its draft reports to the sanctions committee, where they are discussed. After the committee amends a report—and eventually approves it—the chair of the sanctions committee sends the report to the UNSC, after which it becomes a public UN document. The MGS is formally independent. Yet, through this approval procedure, as well as the fact that its finances as well as the re-appointment of members are in the hands of the secretariat, the MGS is informally relatively dependent. Although the MGS is a less stable form of laboratory, it still occupies a central position since the MGS’s knowledge is formally authorized by the sanctions committee and the UNSC.

The MGS produces a type of authoritative knowledge which is based on the validity claim of working within a distinct methodology which provides, in the words of the MGS, “evidentiary standards and verification processes” (UN Doc. S/2008/274:9). The MGS is based in the region and headquartered in Nairobi, Kenya. The main work of the MGS is to conduct interviews with officials or former officials from local African embassies and Somalian authorities. They seek out local informants and question them about developments, but also seek information through formal requests to governmental authorities. Moreover, they review local newspapers and follow up on respective stories. The MGS wants to collect “information” from “multiple sources” and from “sources with firsthand or quasi firsthand knowledge of events” by gaining “access to those involved in arms embargo violations by way of individuals who have direct knowledge or know people who have direct knowledge of details of violations” (UN Doc. S/2008/274:9). The practice of the MGS is weakly structured and rather erratic and ad hoc. It involves following leads and traces and resembles detective work, police investigations, or the work of intelligence agencies. In this sense, the practices of the MGS are not systematic and do not follow a standardized methodology and in
consequence have been criticized as working according to a principle of trial and error (Farrall 2009:201).

The MGS describes its practice as identifying “consistency in patterns of information and comparing existing knowledge with new information and emerging trends” and to “continuously factoring in the expertise and judgement of the relevant expert of the Group and the collective assessment of the Group” (UN Doc. S/2008/274:9). The knowledge generation of the MGS is thus a translation mechanism, which is centered on the expertise of the individuals who participate in the group. Knowledge is produced through the collective interpretation process of the group. Following UNSC Resolution 1519, the MGS is comprised of four experts. In line with general procedure in the UN, experts are appointed by the General Secretary following a selection process by the UN Department of Political Affair’s UN Security Council’s Subsidiary Organs Branch (Farrall 2009:207). The MSC combines different forms of subject-specific expertise (identified for instance as fields such as “regional,” “arms trade,” “custom,” or “transport” expertise) but also combines forensic as well as scientific experience.12 A core part of the knowledge generation is that the MGS is located in the region and hence can base its knowledge on a claim of “being there.” With some resemblance to forms of anthropological knowledge and the method of participant observation, the MGS collects and assembles what can be called “local knowledge.” As understood by Yanow (2004:12), local knowledge is “the very mundane, yet expert understanding of and practical reasoning about local conditions derived from lived experience.”

In their work, the MGS assembles various types of knowledge and artifacts and translates them through the filter of the group’s expertise and interpretation process. As can be observed from their reports, their practice is one of extracting from a complex local environment largely by extrapolating from case studies. For instance, the 2007 report presents the case of the MV Rozen, and the 2008 report discusses in detail the Golden Nori incident and formulates general claims about the character of piracy from these cases. These claims can be of a very general character. The 2007 report claims that “it can be confirmed that piracy off Somalia, unlike in other parts of the world, is caused by a lack of lawful administration of the mainland” (UN Doc 2/2007/436:24). This is but one of the causal claims the reports make, drawing on single cases. In addition to presenting such causal claims, the reports largely draw on a narrative form of representation. An often prosaic style of writing is used, rather than technical language. This can be seen in the passage below:

There is no doubt that the increase in piracy attacks is caused by the climate of lawlessness that currently prevails on the mainland of Somalia, providing sanctuary and allowing the “lords of piracy” to carry out their operations unhindered. (UN Doc 2/2007/436:29)

The MGS thus points us to a very different form of epistemic practice than the quantification of the IMO. The practice is one of translating local knowledge by drawing on a form of interpretative methodology based on “being there,” close contacts with local interlocutors, and the interpretive collective expertise of the group. Rather than rendering piracy in technical terms, the MGS reports produce narrative knowledge in which metaphors rather than numbers are important representative devices. If quantification produces high epistemic certainty, the causal claims and narratives produced by the MGS are much more contested.

12At least two of the former coordinators of the MGS have considerable experience in academia, including Bryden (see for example 2003) and Chopra (for example 1996).
Indeed, the reports have frequently led to public controversies over the claims made as well as to rebuttal statements.13

**Special Advisors: Network and Diplomatic Knowledge Generation**

A third epistemic practice is the work of a special advisor. As with the two other epistemic practices, the work of a special advisor is an established and regular epistemic practice in the UN. Appointing Special Representatives of the Secretary General has become a frequent practice in the UN (Convergne 2013), and their work is a crucial epistemic practice in that they generate knowledge. Special advisors and representatives are a rather precarious form of epistemic practice given that their work is usually temporally limited and often very task specific. This is certainly the case for the work of the special advisor, Jack Lang. He was appointed as Special Adviser on Legal Issues related to Piracy off the Coast of Somalia in August 2010 for a 6-month term (UN Doc. SG/A/1260 (2010)). His task was to produce a report.

The report, published in 2011 and known as the Lang Report, not only details options for dealing with piracy, but also conducts an assessment of piracy and how it is developing (UN Doc. S/2011/30 (2011)). The underlying epistemic practice of the report is that of “diplomatic knowledge production” (Neumann 2012). In contrast to the MGS, it is not centered on expert interpretation of new information, but on collecting and assembling a representative set of existing interpretations. It is about coordinating and collating knowledge about piracy held by other actors and arranging it in an acceptable way.

Lang was supported by the Office of Legal Affairs’ Division for Ocean Affairs and the Law of the Sea, the Department for Political Affairs, and a small team providing secretarial support. Lang draws on legal academic experience and has held various parliamentarian, governmental as well as diplomatic positions.14 Lang’s report reveals a combination of scientific as well as diplomatic activities. As exemplified in the report, Lang interpreted his main task as undertaking “numerous political and legal consultations in order to seek an effective solution which States would generally endorse” (UN Doc. S/2011/30, 9 (2011)). The use of the phrase “consultation” is revealing here as it marks a major difference to the work of the MGS. If the MGS follows traces and conducts interviews to construct knowledge about piracy through interpretation, Lang’s team collected and combined existing interpretations.

The methodology section and the appendix of the Lang report detail how producing the document was dependent on substantial travel activities and a wide range of consultation meetings. Lang traveled to different destinations, including Somalia, Nairobi (where the majority of implementing agencies are based), as well as various state capitals and embassies. The appendix lists the individuals he consulted. The list includes high-ranking state officials, including presidents and ministers of foreign affairs, high-ranking military officials, high-level IO representatives from the UN system as well as IOs such as EU and NATO, industry representatives, eminent persons, including former special representatives, as well as academic researchers. The report adheres to high standards of transparency. This is first indicated by the fact that the report carefully lists all of the interlocutors. Second, evidence for claims is footnoted throughout the report and the sources for information are provided. The bulk of the report reveals that three types of analyses have been conducted. First, the effects of piratical activity on Somalia’s social fabric, economy, and politics, on the regional

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13This includes, for instance, the controversy over the allegation that the government of Puntland is involved in piracy, or the claim that the World Food Program Somalia is involved in corruption.

14Compare Lang’s biography in UN Doc. SG/A/1260 (2010).
economy as well as global trade relations are investigated. Second, the report details what is currently being done to counter piracy on land and at sea. Third, the report identifies “obstacles,” that is, “legal hurdles,” “capacity issues” and “political will” (UN. Doc S/2011/30 (2011)). Based on this analysis, the report makes 25 proposals for how these obstacles can be overcome. These include improving existing counter-piracy practices as well as innovative measures centered on the prevention, as well as repression, of piracy within Somalia.

The work of Lang can be understood as an example of diplomatic knowledge production that follows the intent that “everybody should be heard, and everything should be included” (Neumann 2012:89). The method of selecting what is assembled primarily follows the intent to represent what is known and to ensure that everyone representing a relevant actor is heard. Diplomatic knowledge generation in this sense is not only centered on wide consultations and networking activity, but also aims at consensus creation. For the report, Lang assembled a vast kind of network, which the report represents as a whole. This includes not only various states, different IOs, and scientific experts, but also various authorities in Somalia. Just how far Lang’s practice followed such an account, and how the report represents not his own voice but the network as a whole, becomes clear in the following quote where he describes his activities:

We have visited many countries, not for touristic reasons. We have met many people, in the countries of the region, in Europe, in Washington, in London, in IOs. Many experts. It was very important for me and for us to understand better what is exactly the situation. What are the different ideas. And I’m very grateful to the many people who have accepted to meet to discuss with me, and who gave me excellent ideas, excellent observations. So the report is a little bit the fruit of a collective work, even it’s signed by me. But it’s really the fruit of a collective work, and we are also continuously in discussion with the United Nations Secretariat here … And I met many times the ambassadors … And it was very useful.

(Lang in IPI 2011:2)

The epistemic practice we can observe here is an attempt to create new knowledge by assembling existing knowledge, translating it in one place, and weaving it into a coherent logical narrative. The report then filters or condenses global and local knowledge. The case of Lang thus leads us to a third type of epistemic practice, which follows a diplomatic mode of knowledge production blended with scientific elements. It is centered on assembling a network and developing a coherent narrative in which all agencies have a role.

Comparing Epistemic Practices

The three epistemic practices all assemble different actors, knowledge, and claims, translate these, and manufacture representations to make piracy known at the UNSC. They represent different ways by which the UNSC knows piracy. As summarized in Table 1, the types differ considerably. The first is a practice of quantification and measurement, which turns piracy into a quantity. It uses

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reporting forms as a core device for knowledge production, and validity is ensured through the use of databases and a strict methodology. The second blends forms of anthropological knowledge production with police and intelligence work and is centrally concerned with the translation of local knowledge through the interpretation of an expert team. Piracy is represented in a narrative of local events. The core devices used are interviews with local interlocutors, and validity is created through a claim of expertise as well as having been there. The third combines forms of scientific and diplomatic knowledge production and is concerned with assembling a network of existing interpretations from a representative spectrum of actors. Piracy is made known by compiling and combining existing knowledge. The core devices are consultations, and validity is created through representativeness, that is, a transparent claim that all relevant actors have been heard. The epistemic practices create knowledge of different certainty. Quantification leads to numbers and Lang’s networking to accepted claims. The MGS reporting in contrast generates knowledge, which remains highly contested and locally bound.

Studying the practice of quantifying piracy led us to a well-maintained laboratory, the IMO. In contrast, the MGS and Lang’s networking are more tempo-spatially precarious forms of knowledge production. The main form of representation produced in all three practices is a document, that is, a report. If the IMO’s reports primarily represent piracy in devices such as numbers, tables, and graphs, the MGS uses devices such as case stories, quotes, and also pictures. Meanwhile, Lang primarily presents numbers and graphs as well as narratives. The product of each epistemic practice is a package of knowledge that constructs the object piracy and is made ready to travel to the UNSC, within the UN system, but also beyond it. At the UNSC (as well as other sites), the “piracies” manufactured in these practices then become part of other sets of practices, such as deliberating what courses of action to take.

The three practices described in detail are not unique to the epistemic infrastructure of piracy: Quantification, the interpretation of local knowledge, and the network of special advisors are widely used in the epistemic infrastructure of the UN. Indeed, the three cases are some of the archetypes of epistemic practices in the UN. It is noteworthy that there are other epistemic practices: The production of the Secretary General’s reports on piracy; the reporting activities of the SG Special Representatives for Somalia; the briefings by other UN agencies or expert institutions such as the NGO Oceans Beyond Piracy; or the work of the UN Contact Group on Piracy off the Coast of Somalia are other epistemic practices. These await closer scrutiny to fully understand the epistemic infrastructure of piracy in the UN. Comparing these different forms of knowledge generation will spur further questions, such as when and how much certainty is produced? Investigations will also have to pay attention to the distinct types of “problematizations of piracy” different epistemic practices produce (Bueger 2013b). Which problematic dimensions do these practices foreground and silence? Which bodies of knowledge become authorized and which ones marginalized and excluded? Finally, studying epistemic practices will also involve paying attention to the various scripts of action they assist in producing.

Conclusion

In this contribution, I have argued that research on epistemic infrastructures and the epistemic practices and laboratory sites that enact them opens up a new productive perspective on knowledge generation in IR. The perspective is shifted from the contributions of actors and their influence in the production of knowledge to the careful empirical investigation of the fragile structures within which knowledge is generated and stabilized and its flow maintained. The three
epistemic practices of piracy I studied in detail revealed quite some variety in how knowledge of the international is generated. IMO’s quantification, the MGS’s expert interpretation, or Lang’s diplomatic networking point to major forms of epistemic practice in global politics. Further research will reveal other forms of epistemic practices and the way they construct epistemic objects through assembling elements, translating them into each other, and representing the object. Knorr Cetina’s practice theory and the related concepts from ANT give us a productive toolbox to decipher and describe these processes of making knowledge. They allow us to open the black box of international knowledge generation and hence problematize the foundations of international relations through practice-theoretical lenses. Such research fills a major gap in the IR literature: We know that knowledge is important, but hardly understand where it comes from, how it is generated and validated in practice. Filling this gap will encourage the study of a wide variety of epistemic objects. In some cases, the number of sites relevant to the respective epistemic infrastructure will be small, in others very extensive. Studying epistemic practice will lead to detailed investigations of rather unconventional sites, many of which have hardly been scrutinized in IR research. This includes sites such as expert panels and commissions, world conferences, think tanks, learning units, or research and analysis sections. On first sight, many of these entities are small. The IMO, or the MGS, certainly are. They are comprised of only a handful of individuals, and they work with limited budgets. Yet, upon closer investigation and by focusing on their practices, it becomes apparent that these entities often assemble and maintain enormous networks. They are the entities that make things known. Tracing such sites, and asking where and how international knowledge is produced, will give us an understanding of what the laboratories of IR are, how they organize the global flow of knowledge and stabilize the objects of the international. Such studies might spur surprising insights, since the laboratories, the sites of knowledge production, are after all also sites of power and might be different ones then we expect them to be.

References


