Making things known: Epistemic Infrastructures, the United Nations and the Translation of Piracy

CHRISTIAN BUEGER,
Cardiff University,
buegercm@cf.ac.uk

Abstract:

How are international phenomenon 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 addressing these questions. Arguing that the practices of international knowledge generation are weakly understood I show how concepts from science and technology studies provide us with 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 spur 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 quantification practices of the International Maritime Organization, the interpretation work of a Monitoring Group and the net-work of a Special Adviser. The article introduces an innovative agenda for studying knowledge generation in international relations by focusing on the practical epistemic infrastructures that maintain knowledge about international phenomena.

Keywords: practice theory; epistemic practice; laboratories; United Nations; maritime piracy;

Constructivist international relations theorists have pointed to the importance of International Organizations (IOs) in producing and disseminating knowledge, but they have hardly studied how knowledge production unfolds in practice. Classically scholars such as Ernst Haas (1975) or Johan Galtung (1986) have scrutinized the epistemic dimension of IOs such as the United Nations. If Haas (1975) suggested to understand IOs as combination of science, technology and politics that intend to manage problems of interdependency, Galtung (1986:1) highlighted that IOs can be understood as

"enormous research conglomerate", which are "trying to process inputs about the empirical world (data, theories, values) into such outputs as background papers, documents, etc.". This classical argument to understand IOs as a mixture of research and political organizations has been further developed in several strands of contemporary literature. Works on epistemic authority have sought to 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 (Cross 2012, Weiss et al. 2009). Studies drawing on organization theory have observed that IOs have increasingly become learning organizations and significantly expanded 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 through 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 effect on how global issues are governed. While the theoretical argument of why knowledge matters is well advanced, the question of how international phenomena are made knowable and which practices of knowledge generation underpin international policy processes continues to be under-explored.

In this article I argue for a substantive focus on the practices of producing international knowledge. I suggest that it is promising to draw on concepts from Science and Technology Studies (STS). STS has considerably advanced our understanding of how knowledge is generated in practice. [1] The insights from STS have however hardly been considered in International Relations (IR) and utilized to understand how the practices of generating the knowledge that produces the objects and problems international policymaking deals with. 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 the 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 Karin 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 the contemporary debates within IR on a 'practice' or 'pragmatic turn' (Adler and Pouliot 2011, Kratochwil 2009) 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

---

[1] See the overviews provided in Biagioli (1999) and Golinski (2005).

two core moves: firstly, a shift towards the study of real-time knowledge production, and secondly, a comparative perspective on the different 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 constructivist research towards 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' which knowledge has to pass through. 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 todays IOs face a novel problem that they have not dealt with before. Hence we can observe which practices the organizations draw on to generate knowledge about piracy. 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 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 groups and special advisers. I use the case to illustrate what kind of research the focus on epistemic infrastructures spurs and to outline an initial empirical typology of different epistemic practices which can inspire future research.

International Organizations, Epistemic Practices, and Laboratories

In many ways arguing for the importance of knowledge has been at the heart of constructivist IR scholarship. It was the main ground on which it was shown that other actors than states matter in international politics and to prove that through the knowledge they bring into politics various types of transnational communities, including norm entrepreneurs, advocacy coalitions or epistemic communities (Adler 2005, Mayntz 2013), but also international administrations (Barnett and Finnemore 2004) have an influence. 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) here "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." Such an understanding follows the original formulation of constructivism in STS[2] in so far as the assumption is that epistemic objects are dependent on the deliberations and interpretations of actors, on situative factors, on the political, rhetorical and other strategies of actors und potentially from their social and cognitive interests (Knorr Cetina 2008: 40). Phrased otherwise, the assumption is that the construction of knowledge is understood, if the nature of the underlying inter-actions is analyzed. Such a perspective has been dubbed a "constitutional logic", given the assumption is that epistemic objects, including knowledge, facts, or norms and rules are best understood by investigating constitutive causes and the elements that construct this object. Studies in IR following such a perspective tend to present an argument how a distinct actor influences the construction of an epistemic object. 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 policy making. The origin of the knowledge that these actors hold and how it is produced is left unexamined. In a similar fashion, 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, and the intricacies of how the knowledge is actually produced and how validity and certainty are constructed is only of secondary relevance. Research into IOs as learning organizations partially provides a 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. Studies such as these are important since they have started to 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 actions and practices of knowledge production. Moreover, they take an inward looking perspective. They study how knowledge is generated within the secretariat for the secretariat, rather than investigating how knowledge travels beyond the administration.

---

[2] For a discussion of constructivism in STS see Golinski (2005). Knorr Cetina (1981) provides an authoritative summary.

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 inter-action and studies of influence towards the practical infrastructures by which knowledge is produced, validated and maintained. The case that practice theory can offer innovative insights for international relations 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 especially in security studies and international political economy led to a flourishing research agenda, with a focus on the practices of diplomats, soldiers or development workers. [3]

Quite surprisingly practice theory has hardly been used in IR to study the production of knowledge.[4] This is astounding in so far as one of the main origins of practice theory is in STS and the attempt to study knowledge production.[5] One reason for this negligence is certainly that IR has come to a somewhat narrow understanding of practice theory in mainly associating it with the works of Pierre Bourdieu, Michel Foucault or Etienne Wenger.[6] Practice theory is however a broader account. It is as Reckwitz (2002) suggests a family of theories. It includes other types of efforts (Nicolini 2013). In the following I draw on the STS tradition of practice theory. This tradition is rooted in the laboratory studies of the 1980s and Karin Knorr Cetina as well as advocates of Actor-Network Theory, such as Bruno Latour are the main protagonists. The core concern of these thinkers has been in understanding the practices by which knowledge is produced, epistemic objects are made, and facts manufactured. It hence seems self-evident that these promise insights for understanding international knowledge production.

Knorr Cetina developed her version of practice theory (concisely summarized in Knorr Cetina 2001, 2008) initially to study the sciences (e.g. Knorr Cetina 1999). Since knowledge creation and validation have to be seen as core drivers of many domains of social life, as she argues (Knorr Cetina 2001), this

---

[3] Compare the summary of practice-theory driven research in Adler and Pouliot (2011).
[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 et al 2001) is a telling indicator for how central STS have been for developing practice theory. At least half of the authors of the volume, which is hailed as the book launching the practice turn across the social sciences, develop their arguments from STS.
[6] Major exceptions include Navarri (2011), drawing on the neo-Wittgensteinian account of Schatzki or Neumann (2002) developing the narrative approach of de Certeau.

implies to significantly widen the perspective. She points out that practice theory provides an alternative understanding to the interactionist understanding of knowledge generation. Instead of interaction, practice theory focusses 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 those fragile structures or orders of meaning what 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 contain often contradictions and ruptures which only work through continuous maintenance. They require to be enacted. The study of practice is hence the investigation of mundane maintenance and ordering structures, which make life possible and allow its working. Any entities and structures depend on preserving, conserving, maintaining and stabilizing processes, through which they can continue to exist.

Knorr Cetina's relational understanding of practice does not differ from others in that it considers different elements that a practice brings together. This includes, as Reckwitz (2002) has summarized it 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. Then practices in this sense are, as Nicolini (2013: 219-220) has summarizes it, "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."

With such an outline Knorr Cetina 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" (Knorr Cetina 2001: 196). In contrast to practice theories that dominate thinking in IR, such as the one of Bourdieu and Foucault, 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 2011: 206) as for instance Adler and Pouliot (2011) have developed it 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 Actor-Network Theory.[7] The core advantage of a focus on relations is to be much more open to creativity, contingency and change. This is on the one side a reaction to the criticism leveled against practice theory that it primarily focusses on reproduction (Duvall and Chowdury 2011).

---

[7] See the discussion in Nexon and Pouliot (2013) as well as Bueger and Bethke (2013).

On the other side it is, as further discussed below, to acknowledge for 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 hence leads us to the study of the permanent patterns and processes of the configuration of practical forms of order. The view turns towards the instruments which enable these structures and can maintain them. From such a perspective also our understanding of IOs changes quite fundamentally. If the traditional view of an IO is that of an arena in which different actors – including states, IO administrations, and transnational communities – interact, deliberate or generate knowledge (Hurd 2011, Johnstone 2011), practice theory leads to a different notion. 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 develop the sketch for 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) argues to read IOs as continuous "work in 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 hosts 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 I develop in drawing on Knorr Cetina's work here. 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. What is required is hence 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. Episteme are closely tied to 'truth', and the belief and trust in distinct objectifying and representing structures which allows 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 side, 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) confounded to a clearly demarcated space, a sub-system or 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 always has only been 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, expert commissions or courts are all sites which host and carry epistemic practices, or are even pivotally driven by them. Epistemic practices are widely dispersed and not specific to a distinct field or sub-system, such as science.

On the other side, if epistemic practice would not be 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 – than to speak about epistemic practice is a theoretical perspective distinct from others. Yet, I want, moreover, to restrict the notion of epistemic practice to refer to a distinct 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, and often have the character of suggesting forms of inventions to manipulate these objects (e.g. 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 extending indefinitely into the depth of a dark closet. […] They continually acquire new properties and change the ones they have." Then 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 (as well as 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 into each other to create a more or less coherent whole. A first question to raise is hence what an epistemic practices assembles, what it brings together and relates to each other. Multiple connections between entities are created, grouped together and hybrids between them are created and 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 for 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 (2000:1) suggested representation can be understood as 'presenting' that which is not immediately at hand, which is absent, and hence needs to be introduced into the present situation, to be made (con)textually visible and available. As Latour proposed, representation is 'acting at distance': in-formation compromises between presence and absence by giving us the inscripted or symbolic form of something without having the thing itself (Pels 2000:1, Latour 1987: 219). Representation hence means the presentation and importation of what falls outside the horizon of vision and immediate control into an actual microworld (Pels 2000:1). This includes knowledge of people and things, of facts, causes, and relations, of values and ideas, of distant places, of social structures and institutions. 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 hence raise three kinds of analytical questions that provide different insights: How does the practice assemble, translate and represent?

Laboratories

Epistemic infrastructures are made up of various sites; epistemic practices are tempo-spatially distributed. An epistemic object such as 'war' or 'piracy' is produced at different sites, including IOs, but also others 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 a center acts as what Callon (1986) has called an "obligatory passage point", that is, a site that knowledge and relations are forced to pass through. Such sites are crucial for maintaining and sustaining the overall structure. For such sites STS scholars have developed the concept of 'laboratory'.[8] Laboratories are sites of cultural mediation that bring about and shape structures and which combine elements from different contexts. They 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 of the social world which is characterized through multiple connections, groupings and hybridization of different understandings of the world and order. Laboratories produce dense packets of knowledge, of older knowledge and experience, and use it to translate it into new knowledge.

The concept of laboratory draws on ethnographies of actual laboratories (Latour 1987, Knorr Cetina 1995). These ethnographies observed that the microworlds and entities manufactured in laboratories were not only having a life inside the walls of the laboratory. The intriguing feature of laboratories is to transcend any inside and outside and create through their interventions stable entities that can circulate to other locations. In laboratories stabilized objects are created and sets of standardized practices are packaged to travel. Laboratories are sites creating, maintaining and sustaining structure. STS scholars including Latour (1987, 2005) have developed these results further into a more generic model. Latour coined the notion of "centers of calculation" to speak about laboratories.[9] 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

---

[8] I here and in the following use the notion of laboratory in a metaphorical sense. For the critique of such a notion of laboratory and the extension of STS work in such a way, see Guggenheim (2012).

[9] See Saul Halfon's (2006) study of global population policy and Rolf Lidskog and Goran Sundqvist (2002) study on the global environmental regime for works drawing on this notion in an IR context.

flows that move along it. The efforts of all elements become directed by, and indeed belong to the center, "which comes to stand for and articulate them all" (Law 2003:8). 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 center as other instances which perform such functions. Indeed it is exactly this argument which makes the notion of laboratories so 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 hence 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. Let me in the next step analyze the epistemic infrastructure of contemporary maritime piracy and provide an analysis of how the epistemic object "piracy" is made known through different laboratories and practices.

The Epistemic Infrastructure of Contemporary Maritime Piracy

Maritime piracy is an issue that has become gradually a concern of the UN throughout the mid-2000s. In 2008 the UN Security Council issued its first resolution on piracy off the coast of Somalia, followed by several consecutive resolutions and since the UNSC is 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 in specific. The case hence gives us a contemporary window into the epistemic infrastructure of an international problem and allows analyzing which epistemic practices are 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.[10] Knowledge about piracy is produced in private security companies, intelligence agencies, embassies, think tanks, universities or in the media. These are clearly part of the more general epistemic infrastructure of contemporary piracy and matter. Yet, they are not formally authorized knowledge producers of the UN. To get a sense for authorized epistemic practices, a useful starting point are 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 that 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 International Maritime Organization, which quantifies and calculates piracy. The second and the third practices lead us to more 'fragile' 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 contemporary piracy. The analysis is based on the interpretation of a number of core texts, as well as interviews with the practitioners of the respective epistemic practices as well as observers of these.

Quantification: Centres of Calculating Piracy

---

[10] Bueger (2013a:102-105) provides an overview.

The first kind of epistemic practices that the above passages reference are reports which "provide evidence" for trends in the development of piracy. The Security Council refers to the reports of the London based International Maritime Organization (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. 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[11]), 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) which was agreed by the IMO's Maritime Safety Committee (MSC). The format consists of the following categories: 1) information on the ship (Ship Name, Type of Ship, Flag, Gross Tonnage, IMO Number), 2) date and time of the incident, 3) geographical position of the incident (broad region such as East Africa, as well as accurate numerical position), 4) a short summarizing description of the incident of up to 50 words, 5) a one to two sentence description of the consequences for crew, ship, and cargo, 6) a brief comment on the action taken by the master and the crew, 7) the coastal authority that the incident was reported to, 8) the source of the incident data (reporting state or international organization) and 9) the actions taken by coastal states. Through the tabulated format the complexity of an incident is hence codified in nine categories and short pieces of information which then in turn can be stored. This incident data is published on the IMO website (GSIS database) and forms the core of the monthly reports which list all incidents in a given month in the above format. The data is 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 regions. 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 (e.g. knifes

---

[11] This includes the IMB-ICC, NATO, the EU, as well as the regional reporting centers which were created in response to the growth of piracy incidents (see Bueger 2013a).

or rifles) were used. Data is 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 in addition also list the names of ships that were affected.

The IMO reports are hence at the end of a longer translation chain by which the complexity of a piracy attack is succinctly reduced and the incident becomes codified. IMO is at the center of a larger epistemic infrastructure that requires the participation of various actors which are tasked to report to the center in the format imposed by the IMO.[12] The IMO reporting practice then firstly 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 the local complexities of piracy are abstracted and piratical activity can be represented 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 the 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 numbers of the IMO reports are frequently used to make claims that more action is required. To give but one example, the Secretary General referred (as recorded by the Department of Public Information, UN Doc.GA/10940 (2010)) to this data in: "Calling the statistics "alarming," he said that according to the International Maritime Organization, the global figure for 2009 was 406 — an increase of 100 over 2008." Quantification here provides the basis to make 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 any counter-piracy measure is successful or not. The quarterly reports hence become tools by which the success of the joint efforts of the international community can be measured.

Monitoring groups: local knowledge and detective work

---

[12] Yet, it is important to acknowledge that this status of the IMO is not uncontested. Indeed other sites have attempted to become the center for incident data, including NATO, the EU, the IMB-ICC as well as the different regional mechanisms (Bueger 2013a: 105).

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 onwards the MGS has gradually extended its reporting on piracy and given it relatively 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 through the interpretation work of a group of experts which engage in activities that resemble anthropological knowledge production or detective work.

Compared to the IMO the MGS is a less well maintained center which 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 hence a more precarious and fragile 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 it is discussed. After the committee approves the report – and eventually amends 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 hand 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' 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 newspaper and follow up on respective stories. The MGS wants to collect "information" from "multiple sources" and "from "sources with first-hand or quasi first-hand 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). Then the practice of the MGS is weakly structured and in the way it implies to follow leads, resembles detective work, police investigations or the work of intelligence agencies. In this sense the practices of the MGS are not systematic or follow a standardized methodology and in consequence have been criticized to mainly work in a principle of trial and error (Farall 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 hence a translation mechanism that 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 and based in Nairobi. In line with general practice 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 (Farall 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.[13]

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 resemblances to forms of anthropological knowledge and ideas of quasi participant observations, the MGS collects and assembles what can be called 'local knowledge'. As expanded 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 it through the filter of the expertise of the group's members and their collective 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 use a narrative form of representation. An often prosaic style of writing is used, rather than a technical language, as 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)

---

[13] At least two of the former coordinators of the MGS have a considerable experience in academia, including Matt Bryden (see e.g. 2003) and Jarat Chopra (e.g. 1996).

The MGS hence points us to a very different form of epistemic practice then 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. Indeed, the reports have frequently led to public controversies over the claims made as well as rebuttal statements.[14]

Special advisors: Net-work and diplomatic knowledge generation

A third type of epistemic practices is the work of a special advisor. Similarly to the two other epistemic practices also 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 also a crucial epistemic practice in that they generate knowledge. Special advisors and representatives are a very precarious form of epistemic practice given 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 six months term (UN Doc. SG/A/1260 (2010)).

Similar to the other practices, also the work of Lang and his small team had as its main output a report (UN Doc. S/2011/30 (2011)). The report published in 2011 and known as the Lang Report, not only entails options for dealing with piracy, but also conducts an assessment of piracy and how it is developing. 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 on the one site and on the other has held various parliamentarian, governmental as

---

[14] This 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.

well as diplomatic positions.[15] Lang's document reveals a combination of scientific as well as diplomatic activities. As exemplified in the report, Lang interpreted his main task as "to undertake 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 report detail that producing the document was dependent on substantial travel activities and a wide range of consultation meetings. Lang travelled 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 has consulted with. 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 is written in following almost academic standards of transparency and accuracy. This is firstly indicated by the fact that the report carefully lists all of the interlocutors. Secondly, 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. Firstly, the effects of piratical activity on the Somalia's social fabric, economy and politics, on the regional economy as well as global trade relations are investigated. Secondly, the report details what is currently being done to counter piracy on land and on sea. Thirdly, 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. This includes improving existing counter-piracy practices as well as suggesting 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 here is hence primarily with 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

---

[15] Following the UN (UN Doc. SG/A/1260 (2010)) Lang is a professor of public law was a deputy of the National Assembly of France and as a member of the European Parliament, special envoy of the President of France to Cuba to the Democratic People's Republic of Korea, was Minister of Culture and Education and President of the foreign affairs committee of the National Assembly.

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, scientific experts, but also various authorities in Somalia. In 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 international organizations. 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)

Two statements further strengthen the claim of how important the network as a whole is for the report. Asked about one of the report's figures, Lang suggested that

> "the estimate of the 25 million dollars would need further expertise, but I trust UNODC. Anyway, it is quite reasonable." (Lang in IPI 2011: 8)

In a similar fashion Lang responded to a question by an ambassador whether one of Lang's proposals would be viable:

> "I have not invented it. It's an idea, and I've spoken on this idea with your president last month" (Lang in IPI 2011: 9)

The epistemic practice we can observe here is hence 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 hence leads us to a third type of epistemic practices 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

These three types of epistemic practices represent different ways by which the UNSC knows piracy. As summarized in table one, the types differ considerably. The first one is a practice of quantification and measurement which turns piracy into a quantity. It uses reporting forms as a core device for knowledge production and validity is ensured through the use of databases. 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. The core devices here 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. The core device are consultations and validity is created through representativity, that is, making a transparent claim that all relevant actors have been heard.

Table one: Comparing Epistemic Practices

	IMO	*MGS*	*Lang*
Translation Mechanism	Quantification	Interpretation / Following traces	Networking / Coordination
Devices	Reporting Forms	Interviews	Consultations
Validity	Databases	"Being there", Expertise of Members	Representation, Transparency
Epistemic Certainty	High	Low	High

Studying the practice of quantifying piracy led us to a well maintained laboratory. In difference the MGS and Lang 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 which 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 practice then become part of another set of practices, such as deliberating the 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 net-work of a special advisor 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 academic expert institutions such as the Oceans Beyond Piracy program, or the work of the UN Contact Group on Piracy off the Coast of Somalia are other epistemic practices which await to be closer scrutinized to fully understand the epistemic infrastructure of

piracy in the UN. Such investigations will also have to pay attention to the distinct types of "problematizations of piracy" different epistemic practices produce (Bueger 2013b), which problematic dimensions they foreground and silence, and which scripts of action and implementation they propose.

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 international relations. 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, stabilized and its flow maintained. The three epistemic practices of piracy I studied in detail, revealed quite some variety of how the 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. 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 evoke studying a wide variety of epistemic objects. In some cases the number of sites relevant in the respective epistemic infrastructure will be small, in others very extended. Studying epistemic practice will lead to detailed investigations of rather unconventional sites, which have hardly been scrutinized in IR and IO research. This includes expert panels and commissions, world conferences, think tanks, learning units, or research and analysis sections. On the first sight entities such as the IMO, or the MGS are small. 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 visible that these entities assemble and maintain an enormous network. 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 international relations 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, which are after all also sites of power, might be different ones then we expect them to be.

References

ADLER, EMANUEL, AND VINCENT POULIOT. (2011) International Practices. *International Theory* 3 (1): 1-36.

ADLER, EMANUEL. (2005) *Communitarian International Relations. The Epistemic Foundation of International Relations*. London/New York: Routledge.

ANTONIADES, ANDREAS. (2003) Epistemic Communities, Epistemes and the Construction of (World)Politics. *Global Society* 17 (1): 21–38.

BARNETT, MICHAEL N, AND MARTHA FINNEMORE. (2004) *Rules for the World: International Organizations in Global Politics*. Ithaca, New York: Cornell University Press.

BENNER, THORSTEN, AND PHILIPP ROTMANN. (2008) Learning to Learn? UN Peacebuilding and the Challenges of Building a Learning Organization. *Journal of Intervention and Statebuilding* 2 (1): 43-62.

BEST, JACQUELINE AND WILLIAM WALTERS, ED. (2013) Forum: Actor-Network Theory" and International Relationality: Lost (and Found) in Translation. *International Political Sociology* 7 (3): 332–349.

BIAGIOLI, MARIO, ED.. (1999) *The Science Studies Reader*. New York & London: Routledge.

BRYDEN, MATT. (2003) No Quick Fixes: Coming to Terms with Terrorism, Islam, and Statelessness in Somalia. *The Journal of Conflict Studies* 22 (2): 24-56.

BUEGER, CHRISTIAN. (2011) The clash of practice: political controversy and the United Nations Peacebuilding Commission. *Evidence & Policy* 7 (2): 171-191.

BUEGER, CHRISTIAN. (2013a) Responses to Contemporary Piracy: Disentangling the Organizational Field, in *Modern Piracy: Legal Challenges and Responses*, edited by Douglas Guilfoyle, Cheltenham: Edward Elgar, 91-114.

BUEGER, CHRISTIAN. (2013b) Orchestrating the Response: Somali Piracy and Ontological Complexity. *Global Policy* 4(1): 86-93.

BUEGER, CHRISTIAN, AND FELIX BETHKE. (2013). Actor-Networking the 'failed State' — an Enquiry into the Life of Concepts. *Journal of International Relations and Development* advance online, 18 January 2013, doi:10.1057/jird.2012.30.

CALLON, MICHEL. (1980) Struggles and Negotiations to Define What Is Problematic and What It Is Not: The Sociologic of Translation. In *The Social Process of Scientific Investigation, Sociology of the Sciences Yearbook*, ed. Karin Knorr, Roger Krohn, and Richard D Whitley, Vol. 4:197–219. Dordrecht and Boston: D.Reidel.

CALLON, MICHEL. (1986) Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay. In *Power, Action and Belief. A New Sociology of Knowledge?*, ed. John Law, 196–234. London, Boston, MA and Henley: Routledge & Kegan Paul plc.

CAMPBELL, SUSANNA P. (2008) When Process Matters: The Potential Implications of Organisational Learning for Peacebuilding Success. *Journal of Peacebuilding & Development* 4 (2): 20–32.

CHOPRA, JARAT. (1996) The Space of Peace Maintenance. *Political Geography* 15 (3/4): 335-357.

CONVERGNE, ELODIE. (2013) The Mediation Support Unit and the production of expert knowledge about mediation at the UN. *Journal of Intervention and Statebuilding,* forthcoming.

CROSS, MAI'A K. DAVIS. (2012) Rethinking Epistemic Communities Twenty Years Later. *Review of International Studies* 39 (1): 137–160.

DUVALL, RAYMOND AND ARJUN CHOUDRY (2011) Practices of theory. In *International Practices*, edited by Emanuel Adler and Vincent Pouliot, eds. Cambridge: Cambridge University Press: 335-354.

FARRALL, JEREMY (2009) Should the United Nations Security Council Leave It to the Experts? The Governance and Accountability of UN Sanctions Monitoring. In *Sanctions, Accountability and Governance in a Globalised World*, ed. Jeremy Farrall and Kim Rubenstein, Cambridge: Cambridge University Press: 191–214.

FREEMAN, RICHARD. (2009) What is 'translation'? *Evidence & Policy* 5 (4): 429-447.

GALTUNG, JOHAN. (1986) On the Anthropology of the United Nations System." In *The Nature of United Nations Bureaucracies*, ed. David Pitt and Thomas G Weiss, 1–22. Boulder, CO: Westview.

GOLINSKI, JAN. (2005) *Making Natural Knowledge. Constructivism and the History of Science.* Chicago and London: The University of Chicago Press.

GUGGENHEIM, MICHAEL. (2012) Laboratizing and Delaboratizing the World: Changing Sociological Concepts for Places of Knowledge Production. *History of the Human Sciences,* forthcoming.

HAAS, ERNST B. (1975) Is There a Hole in the Whole? Knowledge, Technology, Interdependence, and the Construction of International Regimes. *International Organization* 29 (3): 827–876.

HALFON, SAUL. (2006) The Disunity of Consensus: International Population Policy Coordination as Socio-Technical Practice. *Social Studies of Science* 36 (5) (October): 783-807.

HURD, IAN. (2011). Choices and Methods in the Study of International Organizations. Journal of International Organization Studies 2 (2): 7–22.

INTERNATIONAL MARITIME ORGANIZATION (2009) *Reports on acts of Piracy and armed robbery against ships. Issued monthly – Acts reported during February 2009 MSC.4/Circ.134, 22 April 2009.* London: International Maritime Organization.

INTERNATIONAL PEACE INSTITUTE (IPI). (2011) Transcript of the event 'Countering Piracy off the Coast of Somalia, Featuring Jack Lang', Tuesday, January 25, 2011, New York: International Peace Institute, available at: http://www.ipinst.org/~ipinst/images/pdfs/transcript_lang_jan25.pdf [Accessed 20. November 2012].

JAEGER, HANS-MARTIN. (2010) UN Reform, Biopolitics, and Global Governmentality. *International Theory* 2 (1): 50–86.

JOHNSTONE, IAN (2011) *The Power of Deliberation: International Law, Politics, and Organizations,* Oxford: Oxford University Press.

KNORR CETINA, KARIN D. (1981) *The Manufacture of Knowledge: An Essay on the Constructivist and Contextual Nature of Science.* Oxford: Pergamon Press.

KNORR CETINA, KARIN. (1995) Laboratory Studies. The Cultural Approach to the Study of Science. In *Handbook of Science and Technology Studies*, ed. Sheila Jasanoff, Gerald E Markle, James C Petersen, and Trevor Pinch, 140–166. Thousand Oaks: Sage Publications.

KNORR CETINA, KARIN. (1999). *Epistemic Cultures. How the Sciences Make Knowledge*. Cambridge: Harvard University Press.

KNORR CETINA, KARIN. (2001) Objectual Practice. In *The Practice Turn in Contemporary Theory*, ed. Theodore R Schatzki, Karin Knorr Cetina, and Eike von Savigny, 175–188. London/New York: Routledge.

KNORR CETINA, KARIN. (2008) Theoretischer Konstruktivismus. Ueber die Einnistung von Wissensstrukturen in soziale Strukturen. In *Theoretische Empirie. Zur Relevanz qualitativer Forschung2*, 35-78. Frankfurt am Main: Suhrkamp Verlag.

KRATOCHWIL, FRIEDRICH. 2009. Ten points to ponder about pragmatism: Some critical reflections on knowledge generation in the social sciences. In *Pragmatism in International Relations*, eds. Harry Bauer and Elisabetta Brighi, London: Routledge: 11–25.

LATOUR, BRUNO. (1987) *Science in Action: How to Follow Scientists and Engineers Through Society.* Cambridge, MA: Harvard University Press.

LATOUR, BRUNO. (2005) *Reassembling the Social. An Introduction to Actor-Network Theory.* Oxford/New York: Oxford University Press.

LATOUR, BRUNO. (2010) An Attempt at a 'Compositionist Manifesto'. *New Literary History* 41 (3): 471-490.

LAW, JOHN. (2003) *Ordering and Obduracy*. Lancaster: Centre for Science Studies, Lancaster University.

LIDSKOG, ROLF AND GORAN SUNDQVIST. (2002) The Role of Science in Environmental Regimes: The Case of LRTAP. *European Journal of International Relations*, 8(1), 77-100.

LÖWENHEIM, ODED. (2008) Examining the State: a Foucauldian Perspective on International 'governance Indicators'. *Third World Quarterly* 29 (2): 255–274.

MAYNTZ, RENATE. (2010) Global structures: markets, organizations, networks – and communities? In *Transnational Communities. Shaping Global Economic Governance*, eds. Marie-Laure Djelic and Sigrid Quack. Cambridge: Cambridge University Press, 37-54.

NAVARI, CORNELIA. (2010) The Concept of Practice in the English School. *European Journal of International Relations* 17 (4): 611–630.

NEUMANN, IVER B. (2002) Returning Practice to the Linguistic Turn: The Case of Diplomacy. *Millennium: Journal of International Studies* 31 (3): 627–651.

NEUMANN, IVER B. (2012) *At Home with the Diplomats. Inside a Foreign Ministry*. Ithaca: Cornell University Press.

NEXON, DANIEL H, AND VINCENT POULIOT. (2013) 'Things of Networks ': Situating ANT in International Relations. *International Political Sociology* 7 (3): 342–345.

NICOLINI, DAVIDE. (2013) *Practice Theory, Work, & Organization*. Oxford: Oxford University Press.

PELS, DICK. (2000) *The Intellectual as Stranger. Studies in Spokespersonship*. London & New York: Routledge

PORTER, THEODORE M. (1994) Making Things Quantitative. *Science in Context* 7 (3): 389–407.

RECKWITZ, ANDREAS. (2002) Toward a Theory of Social Practices: A Development in Culturalist Theorizing. *European Journal of Social Theory* 5 (2): 243-263.

SCHATZKI, THEODORE R, KARIN KNORR CETINA, AND EIKE VON SAVIGNY. EDS. (2001) *The Practice Turn in Contemporary Theory*. London: Routledge.

SCHATZKI, THEODORE R. 2005. "Peripheral Vision: The Sites of Organizations." *Organization Studies* 26 (3): 465–484.

SECURITY COUNCIL REPORT. (2010) August 2010 Monthly Forecast: Somali Piracy, available at: http://www.securitycouncilreport.org/monthly-forecast/2010-08/lookup_c_glKWLeMTIsG_b_6156401.php [accessed 20. November 2011]

SENDING, OLE JACOB AND NEUMANN, IVER (2011) Banking on Power: How some practices in an international organization anchor others. In *International Practices*, Emanuel Adler and Vincent Pouliot, eds. Cambridge: Cambridge University Press: 231-254.

SRIVASTAVA, SWATI. (2013) Assembling International Organizations. *Journal of International Organization Studies* 3 (1): 72–83.

UNITED NATIONS. (2013) Selected Documents related to the Security Council Committee pursuant to Resolutions 751 (1992) and 1907 (2009) concerning Somalia and Eritrea. New York: United Nations, available at: http://www.un.org/sc/committees/751/selecdocs.shtml [accessed 11. January 2013]

WEISS, THOMAS G, TATIANA CARAYANNIS, AND RICHARD JOLLY. (2009) The 'Third' United Nations. *Global Governance* 15 (1): 123-142.

YANOW, DVORA. (2004) Translating Local Knowledge at Organizational Peripheries. *British Journal of Management* 15 (S1): 9-25.